No. 944

UNITED STATES CIRCUIT COURT OF APPEALS

FOR THE NINTH CIRCUIT.

J. M. K. LETSON AND F. W. BURPEE
Appellants,

vs.

THE ALASKA PACKERS' ASSOCIATION,
Appellee,

THE ALASKA PACKERS' ASSOCIATION,
Appellant,

vs.

J. M. K. LETSON AND F. W. BURPEE,
Appellees.

Brief for Appellants Letson and Burpee.

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Records of Circuit

Court of appeals

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IN THE

United States Circuit Court of Appeals

FOR THE NINTH CIRCUIT.

ALASKA PACKER'S ASSOCIATION,
Complainant and Appellant,
vs.
J. M. K. LETSON and F. W. BURPEE,
Defendants and Appellants.

BRIEF FOR DEFENDANTS AND APPELLANTS LETSON AND BURPEE.

This is a suit in equity brought to obtain the usual relief for an alleged infringement of United States Letters Patent No. 376,804, bearing date January 24th, 1888, and granted to Mathias Jensen and the Jensen Can Filling Machine Company, for a can crimper and capper. The complainant has been the owner of said patent ever since the 16th day of May, 1896, which covers all of the time during which infringement is charged against the defendants.

The action was brought in the Circuit Court of the United States, Ninth Circuit, in and for the District of Washington; and was tried before His Honor C. H. Hanford, the Judge of said Court.

Testimony was taken by both the complainant and the defendants, and, after a full hearing the Court decided that the defendants had infringed claims five, nine and ten of the patent, but that they had not infringed either one of the claims one, three or eleven.

The opinion and decision of the said Court is in the record, pages 434 to 460.

Both parties were dissatisfied with the decision and both parties have appealed from the decree of the Circuit Court to this Court of Appeals.

The assignment of errors of the defendants Letson and Burpee is in the printed record at pages 467 and 468.

There is only one printed record in this Court. That printed record contains the full record of both sides. The complainant's assignment of errors is on pages 477 and 478.

This being a case of cross appeals, we will, for convenience and greater certainty of identification, use the terms complainant and defendants, instead of appellant and respondents.

The main issues in the case are upon the question of infringement, and the assignment of errors of both parties relate to the issues regarding infringement. The defendants, Letson and Burpee, assign as errors the

decision of the Circuit Court which finds that they have infringed claims five, nine and ten; while the complainant assigns as error, that the Circuit Court erred in not deciding that the defendants Letson and Burpee had infringed claims one, three and eleven.

There is but very little conflict in the testimony. Most of the material facts are established beyond any controversy and are practically undisputed.

The questions to be decided by this Court of Appeals are whether or not the defendants have infringed claims one, three, five, nine, ten and eleven of the said Jensen patent, or either of them, when the law is applied to the material facts that are established.

FACTS OF THE CASE.

The record contains a cross appeal, as before stated, but the testimony and facts, and law apply alike to both appeals, and most of the arguments will apply to both appeals alike.

The patent sued upon describes a modified form of automatic can capping or heading machines, several of which machines this Court has become familiar with in past litigation. In fact this identical patent was before this Court in the case of Norton vs. Jensen 49 Fed. 859. So far from being a pioneer invention in can capping or heading machinery, it was decided by this Court in the case referred to that the machine covered by the Jensen patent was itself an infringement upon no less than four prior can heading patents. In that

case *six prior patents or can heading* or capping machines were sued upon, and, besides, the prior patents that were sued upon, there were other prior patents on machines for heading cans put in evidence by the counsel of Jensen, who, in that case, was a defendant. Jensen's machine described in the patent herein sued upon was but a modification of well known can capping machines already in use. It was itself a can capping machine, and (leaving off its crimping apparatus, which has nothing to do with this case as the defendants have never used any crimping apparatus), it is nothing but a can heading machine. The terms "can capping" and "can heading" mean exactly the same thing. They are only different names for one and the same thing. Every can capping machine is a can heading machine and vice versa.

While the Jensen machine was but a modified form of the can capping machines already in use, it nevertheless contained valuable improvements and changes that adapted it particularly for use for putting a single head upon a can while the can was in a vertical position, and in practice it was used more especially for putting the upper head upon cans that were filled with raw fish.

Doubtless, it could also be used for putting the first head upon the empty can body. The defendants' machines were so used. Record, pages 390 and 391. Still the machine was a long way down the list of can capping machines from the first, or pioneer machine. But more of this hereafter.

The patent has sixteen claims, but only claims 1, 3, 5, 9, 10 and 11 are asserted to be infringed. The defendants' machine has no crimping apparatus attached to it of any kind, and some of the claims of the Jensen patent cover its crimping devices. Those of course were not infringed. There are also other claims of the patent of which no infringement is asserted, and no attempt is made in the testimony to show any infringement thereof. Proof of alleged infringement is confined to the six claims above enumerated.

Defendants' answer contains a full denial of infringement, and also sets up anticipating matter, only a small portion of which was introduced in evidence.

The bill of complaint waives an answer under oath, and neither the bill of complaint nor the answer is verified.

The defendants have two machine shops in both of which they have manufactured machines of the kind which are claimed to be infringements of the complainant's patent. One of these machine shops is located in the city of Vancouver in British America. Of course the making and selling of machines in British America could not infringe the complainant's United States patent since that patent does not extend into British America.

The other of the defendants' machine shops is located at Fairhaven in the State of Washington, which is within the United States.

The machines made in the United States by the defendants are made under a United States patent No. 629,574 baring date July 25th, 1899, and was granted to the defendants for a can capping machine. This patent of the defendants' was put in evidence by the complainant, and is "Complainant Exhibit Defendants' Patent.," Record, page 97. The exhibit itself is in the record at pages 519 to 533.

The machines made by the defendants were made in accordance with the machine described in said patent. Some of them, however, contained slight modifications in a few particulars of the description of the patent. These modifictaions are shown in the testimony of Mr. Burpee, taken by complainant. There is no conflict we believe in the testimony as to the exact description of the machines, and every part of the machines, that have been made by the defendants. The record from page 28 to page 45 tells the whole story regarding infringement.

As the Jensen patent sued on shows for itself what it is and what it covers, and as the machines made by the defendants were made as described in their said patent, with slight modifications as to some of the machines, an exact and undisputed description of which is shown in the testimony, there is really little, and probably nothing, to do in deciding this case except to compare the defendants' machines with the said claims of the complainant's patent and find whether or not the combinations of those claims, or of any of them, are to be found in the defendants' machine.

We believe and contend that there is no infringement of any claim of the Jensen patent by the defendants' machines, even though those claims were allowed all the force that could be contained within the broadest scope that could be given to the language in which they are expressed, and without any limitation being placed upon them by proof of the prior state of the art in can heading mechanism.

Defendants have, however, put in evidence testimony which shows something of the state of the art. The oral testimony shows that automatic can heading machines were in common use before Mr. Jensen made his invention. In addition to this defendants have put in evidence two prior United States patents for showing, in some particulars, the said state of the said art.

One of these was Patent No. 265,617, bearing date October 10th, 1882, and granted to George A. Marsh, for a machine for heading cans. It is defendants' Exhibit A. The machine described in this patent was operated largely by hand. It was well adapted to putting the upper head on filled fish cans. It put the head on the upper end of the can body while the can was in a vertical position. This patent says in its specifications:

"The purpose of my invention is to provide a con-
" venient device for heading cans. In packing goods
" in open-top cans the cover must be placed upon the
" can *after the can has been filled,* and consequently
" while it is in an *upright position.*"

And further along it says:

"In operation, the can, *having been filled,* is placed "against the base of the machine, its wall resting "against the guides n n." The machine of this patent was well adapted for putting the upper head on filled fish cans.

This exhibit was put in evidence during the cross-examination of the plaintiff's expert, L. W. Seely. Record, pages 255 to 257.

Defendants' Exhibit F is a full sized model of the above Marsh patent. It was put in evidence while taking testimony of defendant Burpee, and he testifies that the machine would head filled fish cans just as perfectly in all respects as the Jensen machine does or ever could. Record, 334 to 336.

The other prior patent that was put in evidence to show the state of the art was Patent Nos. 307, 197, bearing date October 28th, 1884, and granted to Edmund Jordan for a can-ending machine. This patent was put in evidence during the cross-examination of the complainant's expert, L. W. Seely. It is defendants' Exhibit B. Record, 258 and 259.

Afterwards, and while defendant Burpee was giving his testimony, the defendant put in evidence a model which contained such part of the machine, described in said Jordan patent, as received the can heads and placed them upon the can bodies. This model is defendants' Exhibit E. Record, 329. This Jordan machine put the heads upon the can bodies while the can

bodies were in a vertical position, and it was an automatic machine.

By reading the said patents to Marsh and Jordan, while viewing the respective models, Exhibits F and E, the patents are easily understood.

The Jensen machine is what is commonly called a stop motion machine. By "stop motion" is meant that the *can body stops* its forward movement, on its way through the machine while the head is being put upon it. The term does not mean that all the mechanism of the machine stops its work. The devices which place the head upon the can body must do this part of their work while the forward motion of the can body is temporarily suspended. The term "stop motion," as we use the term, means that the can body stops its forward motion through the machines while the head is being forced upon it.

The defendants' machines, on the other hand, places the head upon the can body while both the can body and the can head are moving forward through the machine. In the defendants' machines no time is lost while the head is being forced upon the body, for the reason that the head is so forced upon the body while both the body and the head keep on with their forward motion while the head is forced upon the body, just as a railroad passenger does not lose any time while taking his meals upon the dining car that goes with the train that is speeding him on his journey while he is eating.

This saving of time by having the head forced upon the body while both are traveling forward through the machine is so much that one of the defendants' machines will head twice as many cans as will the Jensen machine. Record, 297 and 298. In the Jensen machine the can bodies stop their forward motion while the head is being forced upon it. During this stop the can moves upwards and downwards, but not forward on its way through the machine.

This difference between the two machines, one being a stop motion while the other is a continuous motion machine, is fundamental. As will be readily understood, the different character of the movements of the machines results from the fact that they are built upon radically different plans, operate upon different principles, have different mechanism as a whole and different devices in detail and different combinations and sub-combinations of devices throughout their entire organizations.

The witnesses *upon both sides* of the case fully agree on the fact that the devices used to produce effects in one of the machines could not be used in the other machine. This results on account of the fundamental differences in the general plans and organizations of the machines, their different modes of operations, all of which necssarily require different characters of devices, and a different character of sub-combinations of operative devices in order to operate the different plans and organizations of the two different machines.

The complainant has put its patent in evidence. In order that it might be easily understood and its operations, in gross and in detail, comprehended with certainty, the defendants have made and put in evidence a full sized working model of the machine which is capable of heading cans. This model is the defendants' Exhibit D. Record, 299.

As already stated, the complainants put in evidence the defendants' patent. This is a convenient way of showing the description of the machines which the defendants were making and selling. In order to make their patent more easily understood the defendants put in evidence one of their actual machines, and placed upon its several parts and devices the same figures and letters that indicate the same parts and devices in their patent. This machine of the defendants' is their Exhibit C. See Record, 290 and 291. From page 291 to page 295, is contained an oral description of the machine and its operations.

In the Jensen machine the filled fish cans are placed in a vertical position upon a constantly moving horizontal belt and are carried by the belt into the machine. Over the belt were arranged spacing fingers to regulate the passage of the cans into the machine. Fixed rigidly across the belt is an immovable stop E. When the can reaches this stop E, it stops, allowing the belt to slide under it. In the machine is a device which is called in the patent "the feeder or carrier F." This feeder F consists of a horizontal arm F, extending across the

table at right angles with the feed belt. It has four arms or prongs H, projecting at right angles from it, and at sufficient distances apart to admit of a can being received between them so as to be transferred by their movements. The feeder F is mounted upon the pins of three cranks, I and JJ. These cranks have vertical shafts which are journaled in the frame, and power is applied to move them so that they produce a circular sweeping motion of the feeder or carrier and its forked arms H. The arm F and the arms H are rigidly attached so as to form one single moving device, and the arms H and arm F together constitute the carrier or feeder F.

As the feeder is carried around by the said cranks in its sweeping movement, the first two of the arms or prongs H are brought forward so as to receive between them the can which is standing on the traveling belt and is kept there by the stop E. The further movement of the carrier F transfers the can one step crosswise of the table and at right angles to the belt, at which point the sweeping motion of the carrier withdraws the prongs H from the sides of the can and leaves it standing in its position until the feeder again comes around. The feeder or carrier being again carried around by the cranks, its said first two prongs H receive another can, which has in the meantime been brought by the belt against the stop E, and the first can which was left standing on the table is received between the second and third of the prongs H, and is carried by them on to

the top of a vertical plunger S, and is left standing there until the plunger raises. Over this plunger S is a conical opening in the top part of which is a can head resting upon its rim edge on a circular flange. The conical opening is widest at its lower part, and it acts as a guide to direct the upper end of the can body into the inside of the rim of the can head when the plunger S raises the filled can upwards. The can being thus headed, the upper portion of the conical guide, which is composed of two sliding parts, separates, and by so doing makes room for the head, now upon the can, to descend downwards as the plunger S descends. When the can has descended to its original pasition upon the plunger S, the carrier F again comes around, and the can is received between the third and fourth prongs H, and is moved forward towards the crimping mechanism.

Above the plunger S, and over the can cap when it is in place in the conical hollow guide, is another plunger, U. This plunger U follows the headed can down through the conical guide, resting on top of the can, so as to *steady the can while descending*. On one side of the feed belt A are two vertical shafts I, each having swinging arms J that swing horizontally in the segment of a circle over the side of the belt. Coiled springs around these vertical shafts tend to draw them in one direction, while connecting chains which connect the arms with the carrier F draw them in the opposite direction with the movement of the carrier. In this way

the filled cans on the belt A can only pass, one at a time, to the stop E.

The heads are fed into the machine through an inclined chute, by means of which and an additional large complicated mass of mechanism the heads are carried into the machine, their descent down the inclined chute is regulated, and they are finally forced into their position in the upper part of the conical guide, over the plunger S as before stated.

In the defendants' machine the filled cans are also carried into the machine by a horizontally moving belt, being placed thereon in a vertical position, and in most of the defendants' machines there were spacing fingers over the belt to regulate the passage of the cans into the machine so as to prevent any can from being accidentally mashed when the belt was not kept full of cans. With this feeding belt and the spacing fingers over it, however, all identity between the Jensen machine and defendants' machine ends and is lost. The Jensen machine being a stop motion machine and the defendants' being a continuous moving machine the mechanism of the one could not be, and was not used in the other. The defendants' machine has no stop E, nor anything that corresponds to it. Neither does it have the carrier F with its prongs H, nor anything that corresponds to it. In the defendants' machine, fixed in a suitable bracket is a vertical spindle or shaft marked 35 in the patent. Attached to this vertical shaft are two skeleton wheels, the upper one being marked 37, and the lower one 36.

These wheels are both of the same shape, and instead of being round they have each four irregular sides. Near the back end of each one of the sides is a sort of pocket or can recess, each one of which is marked 36a in the patent, in the lower wheel. The upper wheel has exactly the same shaped pockets or recesses, and they are in an exact perpendicular line over the pockets or recesses, 36a, in the lower wheel 36.

The said shaft 35 is at one side of the carrying belt 59, that brings the filled cans to the machine. The wheel 36 is a short distance above the belt, and as this wheel 36 revolves its pockets, or can recesses, pass in a circle across the belt and at a distance beyond it. As each one of the filled cans comes along the belt it is received, while it is still under motion, by one of the can recesses in the wheel and carried off from the belt and around in a circle to its place upon one of the can supports 19, which is carried by another revolving device, which we will describe as far as is necessary.

Another vertical spindle 13 is fixed rigidly and immovably in the machine parallel with the shaft 35. A vertical carrier 14, of considerable vertical length, rotates around the spindle 13. This carrier 14 carries a horizontal, rotating table 20. There are four circular openings through this table 20, each of which openings is marked 21. Through these openings 21, the upper end of the filled can passes into the can head.

Underneath the table 20, and revolving with it around the spindle 13, is another horizontally rotating

carrier 14. This carrier has four radial arms 14a, the projecting ends of which have vertical apertures, in which are seated spindles 18. Each one of these spindles carries one of the can supporting disks 19. Between the upper rotating table 20, and the carrier 14, is another device that rotates around the spindle 13, and has four can holding recesses, marked 40 in the patent, therein. The object of this device is to furnish guides for the cans so that, as they are transferred to the can supports 19, the side of the can body will fit into the can holding recess in the radial arm 40, which acts as a guide. The can will thus be placed in exact alignment with the head which will be the opening 21 above it. The table 20, the carrier 14, and the intermediate device carrying the can holding recesses, are connected and all rotate together as one device. The defendants' machine uses, to carry the caps into the machine, a horizontally moving belt 69. The caps are carried into the machine on the opposite side from that where the cans are carried in, and therefore do not have nearly as far to be carried by the feed wheel as do the cans. Upon the spindle 35, and immediately over the can feed wheel 36, is the cap feed wheel 37, which is of the same form as is the wheel 36. This upper cap feed wheel is just high enough to carry the can heads upon the wheel 20, and the arrangements are such that the cap will be carried and placed in the upper part of the opening 21, in the proper position to receive the end of the can body. This cap feed wheel

37, receives the cap in one of its recesses or pockets, and carries it off of the belt and on to the table 20, just as the lower can feed table 36 receives the filled can and carries it around and places it upon the can support 19.

Underneath the can supports is a circular member 47, having inclined surfaces 46. It is really a circular cam. When the can and heads have been placed by the rotating mechanism in their proper positions, the parts still continue to rotate and the stem 18, of the can support 19, comes in contact with the upwardly inclined side 46, of the circular cam 47, and being carried forward is raised thereby and carries the filled can upwards, thus forcing its upper end into the can head, and thus the can is headed. As the rotation still continues the spindle 18, comes to the downward incline on the other side of the member 47, and descending with such incline the headed can is carried downwards to other mechanism which receives it and takes it and carries it around to another belt 73, which carries it out of and away from the machine.

Adequate mechanism is applied to drive the vertical carrier 14, and the two toothed wheels 31, and 39, operating as regular gearing, drive the vertical shaft 35, which carries the feed wheels 36 and 37.

There is much other detail and necessary mechanism which we will examine closer later, while discussing the specific claims of infringement to which the complainants' experts have testified. All that we have so far

intended to present is the general differences between the general plan and organization of the Jensen patented machine and those of the defendants' machines, with such description of the principal operating mechanisms as will make the general character of the operations, and operating mechanism, of the two machines understood.

Before going on to compare the defendants' mechanisms with the said claims of the Jensen patent we will refer the Court to the elementary rules of law that control simple cases of this kind, and which rules we claim should have secured a decree in the Circuit Court for the defendants. We believe that it is not seriously contended that there is anything in the defendants' machines that was ever invented by Mr. Jensen. It is only claimed to reach the defendants by using the term "mechanical equivalents," and then spreading and expanding the term, and by thus doing, make it reach not only to the full limits of Jensen's invention, but into a broad expanse beyond those limits.

Section 4888, of the U. S. Revised Statues declares as follows:

"Before any inventor or discoverer shall receive a "patent for his invention or discovery, he shall make "application therefor in writing to the commissioner of "patents, and shall file in the patent office a written de- "scription of the same and of the manner and process "of making, constructing, compounding and using the "same in such full, clear, concise and exact terms as to

" enable any person skilled in the art or science to
" which it appertains or with which it is most nearly
" connected, to make, construct, compound, and use the
" same; and in case of a machine he shall explain the
" principle thereof and the best mode in which he has
" contemplated applying that principle so as to distin-
" guish it from other inventions; and he shall particul-
" arly point out and distinctly claim the part, improve-
" ment or combination which he claims as his invention
" or discovery."

All this was done by Mr. Jensen as is shown by his patent. It is a machine patent. His specifications explains the principle of his machine and the best mode in which he had contemplated applying that principle, and they distinctly point out and claim the improvements or combinations which he claimed as his inventions.

As shown by his specifications, the best mode in which he applied the principle of his invention, and in fact the *only mode* in which he attempted to apply it, was by the construction of a *stop motion machine*. He did not contemplate any machine in which the can should be moving forward through the machine while the head was being forced upon it. Neither such a mode of operation nor such a principle of construction was contemplated by him. No mechanism by means of which a can could be automatically headed while moving forward was introduced into his machine, and in his application no such continuous movement of the

can while being headed was mentioned or described or in any way, directly or indirectly, even hinted at. The machine which he described did not operate on that principle, or by that mode of operation. Jensen described nothing, and claimed nothing that included the principle of continuous movement of the can on its way through the machine while the head was being forced upon it.

The difference between stop motion machines and continuous moving machines have long been well known, as have machines operating on those two different principles. Sometimes machinery may be changed and the one prinpicle substituted for the other and some times they cannot. A jig saw works with a stop motion while band saws and also circular saws work on the continuous movement principle. Ordinary planing machines for planing metal operate on the stop motion principle, while turning lathes operate on the continuous running principle. The Wheaton heading machine was a machine that operated on the continuous motion principle while the Norton and Hodgson machine operated on the stop motion principle. The Wheaton machine would head four cans while the Norton and Hodgson machine was heading one, and the Wheaton machine was adjudged to be no infringement of the Norton and Hodgson patent. Wheaton vs. Norton, 70, Fed. 833, pages 851 to 853. Machines that operate on the continuous motion principle are much

more efficient than those that operate on the stop motion principle.

It cannot be denied but that Jensen in his specifications has well described the principle of his machine as a stop motion machine, and that the best mode in which he contemplated applying that principle was by means of the mechanism described in his patent which would operate with the stop motion; and his description all through was well made so as to distinguish his machine from any and every machine operating on the continuous motion principle. His description would certainly distinguish his machine from the defendants' machine, even if the defendants' machine had been first.

His claims are also drawn so as to leave outside of them any and overy combination that can be found in the defendants' machine. Not a single combination that is covered by any claim of the Jensen patent is in the defendants' machines. If the defendants had been the first in the field in making an application for their patent *they could not have used or placed in their claims a single one of the Jensen claims,* and had it cover any combination that is described in their specifications, or that has ever been used in their machines. And, now, if the Court was to take the claims of the Jensen patent and the specifications of the defendants' patent and undertake to read those claims into the defendants' specifications it would find itself struggling with a task impossible of accomplishment. It could not

find in the defendants' specifications, or in its machines a single combination that a single one of the Jensen claims would cover. And on the other hand if it should undertake to apply any of the defendants' claims to the Jensen specifications, it would go through the entire list of claims without finding a single combination in the Jensen machine that a single one of the dfendants' claims would apply to.

L. W. SEELY was one of the complainants' principal experts and did the best he could for the complainant. On pages 223 and 224 of the record Mr. Seely testifies that the defendants' machine does so much more work than the Jensen machine does because "the *organization of the whole machine has been changed* so as to give it greater capacity." and that:

"The defendants' machine as a whole is differ-
"ently organized from the Jensen machine in
"order to give it greater capacity." That "*the structural organization*" of the two machines is different.

We make this reference at this time that the Court may know as we go along that the organization of the defendants' machine, which operates with the continuous movement, is proved by the complainant's own witnesses to be fundamentally and radically different in its plan of construction, and in its mechanism, and in its operation, from the Jensen machine, which can be operated only with the stop movement. This the Court will realize we think when we further show the

extent to which the complainant's own professional and skillful experts have so testified.

Further along we shall discuss each one of the said claims of the complainant's patent and will then show more of the same character of testimony by witnesses upon both sides of the case.

The said section, 4888, of the Revised Statues, has been repeatedly construed by the Courts and it is well understood. It is the foundation sill of the patent law structure. It is the law itself. Under it, the courts have decided repeatedly that a patent can never cover anything except what its claims cover. Even though the claims fail to cover the invention, still the patentee is bound and limited by the claims that are made in his patent.

McClain vs. Ortmayer, 141 U. S. 419.

Beginning on page 423 of this case the Supreme Court says: "While the patentee may have been unfortunate "in the language he has chosen to express his actual in- "vention, and may have been entitled to a broader claim, "we are not at liberty, without running counter to the "*entire current of authority* in this Court, *to construe* "*such claims to include more than their language fairly* "*imports.* Nothing is better settled in the law of patents "than that the patentee may claim the whole or only a "part of his invention, and that if he only describes and "claims a part, he is presumed to have abandoned the "residue to the public. The object of the patent law "in requiring the patentee to 'particularly point out

"'and distinctly claim the part, improvement or com-
"'bination which he claims as his invention or discov-
"'ery,' is not only to secure to him all to which he is en-
"titled, *but to apprise the public of what is still open to "them.* THE CLAIM IS THE MEASURE OF HIS "RIGHT TO RELIEF, and while the specification "may be referred to to limit the claim, IT CAN "NEVER BE MADE AVAILABLE TO EXPAND "IT."

And further on page 424:

"When the terms of a claim in a patent are clear and "distinct (as they always should be), the patentee, in a "suit brought upon the patent IS BOUND BY IT.... "HE CAN CLAIM NOTHING BEYOND IT." The last sentence was quoted by the Supreme Court from one of its own prior decisions.

See, also, Keystone Bridge Co. vs. Phoenix Iron Co., 95 U. S. 274, pages 278 and 279.
Burns vs. Meyer, 100 U. S. 671.
Merrill vs. Yeomans, 94 U. S. 568.

Robinson on Patents, Vol. 2, sections 504 and 505. He says:

"The claim is thus the life of the patent so far as the "rights of the inventor are concerned, and by it the let-"ters-patent, as a grant of an exclusive privilege, must "stand or fall."

Another rule of law applicable is this. When the claim is for a combination of devices only, it does not cover either one of the mechanical elements named in

the claim, but in law admits all of those individual mechanical devices to be old and no part of the patentee's invention.

The Supreme Court, in the case of The Corn Planter Patent, 23 Wallace, 181, on pages 224 and 225, says:

"Where a patentee, after describing a machine, "claims as his invention a certain combination of ele- "ments, or a certain device, or part of the machine, this "is an implied declaration, as conclusive, so far as that "patent is concerned, as if it were expressed, that the "specific combination or thing claimed is the only part "which the patentee regards as new. True, he or some "other person may have a distinct patent for the por- "tions not covred by this; but that will speak for itself. "So far as the patent in question is concerned, *the re- "maining parts are old,* etc."

The pertinency of this rule of law appears when we read the complainant's testimony, and there find efforts made apparently to convince the Court that the Jensen *machine* is the invention covered by the patent, and the thing that deserves protection, although the claims of the patent which are alleged to be infringed are only claims for sub-combinations of devices. True, the testimony of its experts changes its tone in this respect in part, but the Jensen machine, *as an entire machine* and pioneer invention, is the burden of a great part of the testimony of complainant.

That there can be no infringement of a combination claim unless every one of the elements of the combina-

tion is used by the defendant was decided as early as the case of Prouty vs. Ruggles, 16 Peters, 336; and that decision has been followed ever since in numberless decisions.

In Rowell vs. Lindsay, 113 U. S. 97, on page 101, the Supreme Court says:

"The patent of the plaintiffs is for a combination "only. None of the separate elements of which the "combination is composed are claimed as the invention "of the patentee, therefore *none of them standing alone "are included in the monopoly of the patent."* The Court then goes on and cites a large number of authorities, and quotes from the case of Prouty vs. Ruggles. See, also, Walker on Patents. Sec. 349. The cases hold, and we freely admit, that if one of the devices of the combination is removed and a mechanical equivalent of the device so removed is put in its place that it is still in law the *same combination,* and would be an infringement just the same as though the exact elements of the original combination were used. It is true that in many cases the use of mechanical equivalents are not to be allowed. This occurs in the cases of very narrow patents where the invention is very thin. We do not claim that the present is such a case, but expect the Court to read our brief with the understanding that when we mention a combination we include in it any mechanical equivalents or substitutes which might be put in place of any of the original elements omitted from that combination. As to

what constitutes a mechanical equivalent or substitute we will show later on.

On pages 103 and 104 of the foregoing case of Rowell vs. Lindsay, the Supreme Court says with reference to mechanical equivalents:

"We find, therefore, that the curved upper part of "the shank used by defendant does not perform one of "the material functions of the brace-bar of the plain- "tiff's combination. It cannot therefore be the equi- "valent of the latter. For where one patented is as- "serted to be an infringement of another, A DEVICE "IN ONE TO BE THE EQUIVALENT OF A DE- "VICE IN THE OTHER MUST PERFORM "THE SAME FUNCTIONS."

"As, therefore, there is one element of the plaintiff's "patented combination which the defendants do not use "and for which they do not employ an equivalent, it fol- "lows that they do not infringe the plaintiff's patent."

A further rule of law is this: When the claim of a patent names an element as one of the elements of the combination which the claim covers, such element, no matter if it is entirely useless, cannot be abandoned by the patentee and his patent construed to cover the remaining elements as the combination patented. This rule is pertinent in view of the efforts made by the complainant to get rid of the Stop E, of claim one of the Jensen patent.

Above section 349 of Walker on Patents. (Second edition.)

In Water Meter Co. vs. Desper, 101 U. S. 332-337, the Supreme Court says:

"Our law requires the patentee to specify particu-
"larly what he claims to be new, and if he claims a
"combination of certain elements or parts, we cannot
"declare that any one of those elements is immaterial.
"The patentee *makes them all material* by the restricted
"form of his claim."

In Fay vs. Cordesman, 109 U. S. 408, on pages 420 and 421, the Supreme Court says:

"The claims of the patents sued on in this case are
"claims for combinations. In such a claim, if the pat-
"entee specifies any element as entering into the com-
"bination, either directly by the language of the claim,
"or by such a reference to the descriptive part of the
"specification as carries such element into the claim, he
"makes such element material to the combination, and
"the Court cannot declare it to be immaterial. It is his
"province to make his own claim and his privilege to
"restrict it. If it be a claim to a combination, and be
"restricted to specified elements, all must be regarded
"as material, leaving open only the question whether
"an omitted part is supplied by an equivalent device or
"instrumentality." Citing authorities.

This Court quoted the above as an authority in Wheaton vs. Norton, 70 Fed., on pages 841 and 842.

Another rule of patent law is that a result or effect produced is not patentable, but only the means are patentable by which the result or effect is produced.

Claims must not be *functional* or they are void.

This point was decided as early as 1853 in the case of O'Reilly vs. Morse, 15 Howard, 62, in a case brought on the Morse telegraph patent. Morse had covered in his first seven claims of the patent his telegraphing apparatus. He then added his eighth and last claim, and in that he stated that he did not propose to limit himself to the specific machinery or parts of machinery described in his specifications and claims; the essence of his invention being the use of the motive power of the electric or galvanic current which he called electro magnetism, however developed for marking or printing intelligible characters, signs, or letters, at any distances, being a new application of that power of which he claimed to be the first inventor or discoverer.

The Supreme Court says on page 113 of the case that: "In fine, he claims an exclusive right to use a "manner and process which he has not described, and "indeed had not invented, and therefore could not de- "scribe when he obtained his patent. The Court is of the opinion that the claim is too broad, and not warranted by law."

The Court held that the said eighth claim of the Morse patent was void for covering what he had not invented.

This case and others establish the further proposition that if the claims of a patent cover more than the patentee invented, or more than he has described in his

specifications such claims are absolutely void. On pages 120 and 121, of this O'Reilly vs. Morse case, the Supreme Court says:

"The evil is the same if he claims more than he has "invented, although no other person has invented it be- "fore him. He prevents others from attempting to im- "prove upon the manner and process which he has de- "scribed in his specification—and may deter the public "from using it, even if discovered. HE CAN LAW- "FULLY CLAIM ONLY WHAT HE HAS IN- "VENTED AND DESCRIBED, AND IF HE "CLAIMS MORE, HIS PATENT IS VOID."

In Miller vs. Eagle Man. Co., 151 U. S. 186, on page 201, the Supreme Court says:

"It is not the result, effect, or purpose to be accom- "plished which constitutes invention, or entitles a "party to a patent, but the *mechanical means* or instru- "mentalities by which the object sought is to be at- "tained," and further, "PATENTS COVER THE "MEANS EMPLOYED TO EFFECT RE- "SULTS."

The law as declared in the authorities cited is also substantially declared by this Court in the case of Norton vs. Jensen, 67 Fed. 236, on pages 242 and 243, beginning as follows:

"These are all combination claims, and each is broad "enough to include every imaginable style of mechan- "ism for forming can bodies and soldering the side "seams thereof. SO REGARDED, THEY WOULD

"ALL BE VOID FOR FAILURE TO DESCRIBE "ANY PATENTABLE INVENTION."

The foregoing rules are elementary, and well understood. Their application and pertinency will be noted in the further parts of this brief.

Because of the strenuous efforts made by complainant and its counsel and experts, in the taking of the testimony, to make it appear that the Jensen invention is one of a primary and pioneer character, we will now discuss that proposition and will endeavor to show that it does not belong to that category of inventions, even if the patent had been made with claims that covered the machine as an entire machine, instead of containing only narrow claims for limited sub-combinations.

Every valid patent must cover an invention that is absolutely *new*. It must have been known to others before the invention thereof by the patentee. If the invention was known to others prior to the invention thereof by the patentee, then the patent would be void, as it would not cover any patentable invention We are not speaking of cases where there have been any assignments, but of those cases where the inventor himself is the patentee.

Now, the condition that the patentable invention must be absolutely new with the patentee applies to the cases of pioneer inventions and primary patents and also with *equal force to the very narrowest* of inventions and thinnest of patents, alike. A narrow inven-

tion must be as new and as original with the patentee as must be the broadest and most pioneer of inventions.

So far, then, as the mere fact that the patentee was the first one that ever discovered or invented the thing patented goes, such fact belongs alike to narrow patents and inventions and to broad patents and pioneer inventions. In a *literal* sense the narrow patent covers an invention that is just as original and just as pioneer in its character as is the invention that the broad patent covers. One invention must be just as original and just as new as the other. If in this case the defendant's patent is valid, and so far no one has asserted that it is not valid, it covers inventions that are just as new as was Jensen's and just as original. The defendants were the first that ever made those inventions, and as to those inventions they were literally the pioneers.

While all this is so in a literal sense, the Courts have for convenience applied the adjectives *pioneer* and *primary* to some classes of patents and inventions to distinguish them from the great mass of inventions in which there is less in the nature of discovery and less breadth and depth of the original ideas which produced them.

There have been inventions made, in which the idea that a certain desirable thing was possible of accomplishment was first thought of by the inventor. The possibility of using an alphabet of any kind to record intelligible words at a distance by the use of electricity was new with Morse. The conception of the possibil-

ity of sewing a continuous seam automatically by machinery was new with Howe. The possibility of using steam to drive a boat was a new idea with Fulton. The almost wild conception of the idea of talking at a distance by the use of electrical apparatus was new with Bell.

In these and other instances of like character, the mechanism by which the new conception could be reduced to practical use, came second, and followed after the new conception. The new conception of a possible new result that had never been accomplished in any manner whatever was the important starting point. Wtihout that as a foundation to work upon nothing new would have been discovered at all, but the whole subject matter would have remained in oblivion. Suppose Bell had never lived and his new conception of the possibility of talking at a distance through the medium of electrical wires had not been thought of by any one else, as it probably would not have been, the telephone would not yet have been dreamed of. The world had been running thousands of years, science had been advancing and developing wonders for generations, but no one had thought of the possibility of talking at a distance by means of any kind. The same may be said of other inventions of similar character where the new result was itself the foundation upon which the new invention was built. It was so with the Morse telegraph right now.

Yet, the new *result could never be the subject of a patent*, but only *the means* by which the inventor produced that result could be patented. This we have shown was demonstrated in the case of the Morse telegraph, in O'Reilly vs. Morse, 15 Howard, 62.

It has ever since the Morse case been an admitted fact that a patentee of a machine patent at least, cannot cover the result which his invention produces. It can only cover the means which the patentee has invented by which the result is produced, even in the extreme cases which we have mentioned where the result itself was, for the first time in the world, not only produced by the patentee, but was also originally discovered by the patentee. In the telephone cases the Supreme Court held that Bell's method included both a process and the means by which he operated the process, making the patent an improvement in an art, and also an invention in mechanics. The decision indorses the case of O'Reilly vs. Morse. See 126 U. S., pages 532 to 536, and authorities there cited by the Supreme Court.

Now, whenever the patent is for a process, or in other words for an *art,* it will be infringed when any kind of machinery is used to practice it. It makes no difference what mechanism or apparatus is used to practice the process with.

Walker on patents, section 335. Bell's telephone patent covered both mechanism and a process.

Telephone cases, 126 U. S., pages 532 and 533. For

this reason there is much said in the decision in the telephone cases that does not apply to a patent that covers mechanism only.

Now, it is evident that cases where the result itself is discovered by the patentee, as well as the means by which that result is produced, are cases in which the terms "primary" and "pioneer" are especially aplicable, and that a patent which covers the mechanism that produces such pioneer result must necessarily be given a very broad construction in order to protect the discoverer and inventor in his discovery and invention. Patentees that first conceive of the possibility of a new result, and then invent the means by which they successfully produce the new result, are both discoverers and inventors.

In telephone cases, 126 U. S. patent, on pages 532 and 533, the Supreme Court after describing what Bell's art was, and how he had put it in a condition for practical use, says on page 533:

"In doing this, both discovery and invention, in the "popular sense of these terms, were involved; *discovery "in finding the art, and invention in devising the means "of making it useful."*

Now, it is this class of inventors that are entitled to the fullest possible protection, and *as they cannot patent the new result, the only method by which they can be protected in it is by giving them the benefit of the doctrine of equivalents,* so as to cover the broad field of their discovery. They patent one form of means by

which their new discovery is made practical and useful to the world. Often, especially in the case of machine patents, there are many forms of mechanisms by which the new discovery may be utilized, and many of them will be better than the means particularly described in the pioneer patent. Unless the courts should decide that the invention included all the equivalents by that the invention included all the equivalents by which the new discovery could be reduced to practice the inventor would lose all benefit of his discovery and be compelled to accept the mere mechanism shown in his patent as the only thing covered by his patent, and this he would often lose because the later and better mechanism put his in the shade.

Primary and pioneer patentees having primary and pioneer patents HAVE NO ADVANTAGE OVER OTHER PATENTEES OTHER THAN THAT OF BEING GIVEN GREATER SCOPE IN THE APPLICATION OF MECHANICAL EQUIVALENTS. *This is their only advantage,* and even this would be lost if the doctrine of mechanical equivalents was applied in the same way to mere improvements on known amchines, or to the accomplishments of results already well known.

Now we contend that it is such cases as those that we have mentioned in which the inventions and patents are held by the courts to be primary and pioneer. Compare the great discovery and invention of Bell with Jensen's invention, in which there was nothing in the na-

ture of a new result discovered, but only a modification of well known can heading machines produced, and how the Jensen modification shrinks into littleness by the contrast.

In the case of Morley Machine Co. vs. Lancaster, 129 U. S. 263, the Supreme Court says on page 273:

"Morley having been the first person who succeeded "in producing an automatic machine for sewing but- "tons of the kind in question upon fabrics, is entitled to "a liberal construction of the claims of his patent. He "was not a mere improver upon a prior machine *which* "*was capable of accomplishing the same general result;* "*in which case his claims would properly receive a nar-* "*rower interpretation.* This principle is well settled in "the patent law, both in this country and in England. "*Where an invention is one of a primary character, and* "*the mechanical functions performed by the machine* "*are, as a whole,* ENTIRELY NEW, all subsequent "*machines* which *employ substantially the same means* "*to accomplish the same result* are infringements, al- "though the subsequent machine may contain improve- "ments in the separate mechanisms which go to make "up the machine."

The foregoing quotation, we think, states the rule fairly and correctly, and well defines what are primary machines. The invention was of a primary character. Probably no one else had ever thought of the possibility of producing a machine that would automatically sew buttons of the kind in question upon fabrics. His ma-

chine was the first ever produced that was capable of producing *the kind of result* which his machine produced. The ultimate general result produced by that machine was new. It was a machine in which the invention was of a primary character. It was a machine in which the *mechanical functions* performed by it *were as a whole entirely new*. It was one of the class of machines to which the terms primary and pioneer were properly applied. This is beyond doubt.

The number of these primary or pioneer inventions and patents are very few, indeed. Their number is extremely limited. Most patents are secondary and involve new methods and improvements upon existing machines. Sometimes such inventions are of very great importance. But the great majority of them are of so little importance that they are never put into practical use. Other things in use are better, and they have no practical value. We do not believe that one patent in ten, and probably not one in twenty, has any practical value, for the reason that what it covers is not wanted and is never used.

Now one of the cases where the patent covered a secondary, though a new, radical and important invention was that of Clough vs. Baker, 106 U. S. 166. Clough had invented a method of applying a bat wing burner to the burning of carburetted or air gas, which was a gas that flowed with a variable density from the generator which produced it. With the bat wing burner Clough used a valve for regulating the gas sup-

ply. He was the first to apply *any kind of a valve regulation* to the combination, and the Supreme Court held that as he was the first to make the combination and the first to apply a valve regulation *of any kind* to the combination, he was entitled "to hold as infringements all valve regulations, applied in such a combination, which perform the same office in substantially *the same way* as, and were known equivalents for, his form of valve regulations." Pages 177 and 178.

Now, in this case the Supreme Court applies the doctrine of mechanical equivalents, but *it does not treat the invention as one that comes under the head of primary or pioneer* inventions. Not a word is said in the decision about *primary* or *pioneer* inventions. Important and radical as the invention was, it was only an improvement in the method of regulating the flow of carburetted or air gas, which was a gas that flowed with a varying density. The same gas had already been flowing through other burners and was, of course, regulated in its flow, to some extent, by the ordinary valves which turned on, and limited the supply of gas that flowed through the burner. The invention and patent were secondary and not primary or pioneer, but an important improvement and advance forward, in an art already developed and in common use. See the beginning of the specifications of the patent on page 165 of the decision.

Another case which has been often cited in other cases by complainant's counsel, and in which he has

claimed that the patent on which the suit was based covered a pioneer invention, is that of Consolidated Valve Co. vs. Crosby Valve Co., 113 U. S. 157. The patent in that case was for improvements in safety valves in steam boilers. Safety valves were old in steam boilers, but a trouble existed with them from the fact that when they were lifted and opened by the pressure of steam in the boiler they would not close until the pressure of the steam in the boiler had been greatly reduced, resulting in a loss of power, and also loss from the increased amount of fuel required to again raise the steam to its working pressure. The inventor, Richardson, invented a safety valve that was a very great and radical improvement over any that had preceded his. The supreme court sustained the patent and applied the law of mechanical equivalents to broaden its construction, when passing upon the issue of infringement. Still, when all of this was done it did not bring the invention under the head of primary or pioneer inventions. As the opinion of the Supreme Court in the case shows, the field of safety valves was already open and largely occupied, but when the Richardson safety valve came into that field, it captured it, because of its great superiority over all other safety valves. In its decision the Supreme Court does not once pronounce the invention to be of a primary or pioneer character. It was a machine patent, but it was not a machine in which "the mechanical functions performed by it were, as a whole, entirely new." It opened when the pres-

sure of steam was too great, just exactly as the prior safety valves had opened when the pressure of steam was too great. This opening was one of the necessary and mechanical functions which it performed, and it was not new. It also closed when the steam pressure was reduced, as others before it had closed, but it had new mechanism and closed much quicker than the others had closed, and before the steam pressure was so greatly reduced. There was only a difference in degree between its ultimate results and the ultimate results of prior safety valves. The Supreme Court did not intimate that "the mechanical functions performed by it were, as a whole, entirely new," and did not apply to it either one of the adjectives "primary" or "pioneer". We have referred to the foregoing cases because complainant's counsl has heretofore cited them as illustrations of what he calls primary and pioneer inventions, and we presume he will do it in this case. We wish to point out the distinction between these cases and those in which the Supreme Court has applied the terms primary and pioneer inventions, such as the Bell telephone and others where the very conception of the subject matter to which they applied was new and such subject matter was itself created by the inventor. Discovery as well as invention is required in those cases which the Supreme Court has classified as primary and pioneer. As before remarked, in a literal sense, every patentable invention must be new with the inventor, and hence, in a literal sense, is primary and pioneer, but only a

very few of them come within the requirements that will place them within the category of primary or pioneer inventions and patents, as the Supreme Court has defined and classified primary and pioneer inventions. This classification is original with the Supreme Court, and that Court has declared what conditions and qualifications of an invention are required in order to place it within the classifications of an invention of primary and pioneer. Among other things primary and pioneer inventions must be absolutely the *first in the art* to which they appertain. They must be the first to produce the *kind of result* which they produce. Probably there is not one patent in a thousand that comes within the classification of pioneer or primary, as those terms are used by the Supreme Court.

Take such extreme inventions as the Howe sewing machine that was the very first machine to sew a continuous seam automatically, or the Morse discovery and invention which created the first telegraph and first discovered the principle upon which a telegraph was possible of construction and operation, and invented and applied mechanism so as to reduce and harness the discovery to practical use for the first time in the world, or the Bell telephone, or Fulton's invention and discovery that steam could be made to drive boats, and it would be strange if the Courts had not used some terms that would place them in a special class that would distinguish them from the great mass of inventions which were not the first in the art to which they belonged, and

in which there was no creation of the result accomplished, but only an improvement in the means of accomplishing known results, and means for increasing the speed, and cheapening the processes, by which known results were produced, inventions that increased the degrees to which known results could be carried, &c., &c., &c. All of these latter kinds of inventions are secondary in degree as compared with the former.

The foregoing rule which we have quoted from the Morley case we claim to be correct when applied as the Supreme Court applied it.

The rule, however, applies to a machine as *an entire machine* or to a device as *an entire device,* and has no application to combination claims. In the case of Fuller vs. Yentzer, 94 U. S. 288, the Supreme Court, in speaking of combination claims, on page 297, says:

"Such an invention, if it produces a new and useful "result, is the proper subject of a patent, and such a pat- "ent is valid and operative; but the right of the pat- "entee under it *differs* in one respect from those of a "patentee for an invention which *consists of an entire "machine, or of a new and useful device*, as the rights "of a patentee for a mere combination of old ingredi- "ents are not infringed, unless it appears that the al- "leged infringer made, used, or sold the entire combination."

See, also, Waterbury Brass Co. vs. Miller, 5 Fisher's Patent Cases, on page 69.

Smith & Griggs Mfg. Co. vs. Sprague, 123 U. S. 249, last seven lines on page 255, and first two lines of page 256.

Curtis on Patents (Edition of 1867), sections 110-111 and 239.

Other decisions have been made construing patents in cases in which the patents covered machines or devices as *entire machines* or *entire devices, and were not patents for combinations only.* In the case of McCormick vs. Talcott, 20 Howard, 402, the subject matter of the patent was a divider, used on a harvesting machine for separating the stalks of grain that were to be immediately cut by the harvester from those that were not to be cut. The Court says, page 405: "If he be the "original inventor of the device *or machine* called a "divider," &c. This was treating the divider as an entire device or entire machine.

The Supreme Court further says on the same page:

"But if the invention claimed be itself but an im- "provement on a known machine by a mere change of "form *or combination of parts*, the patentee cannot treat "another as an infringer who has improved the "*original* machine by use of a *different form or combi-* "*nation performing the same functions.* The inven- "tor of the first improvement cannot invoke the doc- "trine of equivalents to suppress all other improve- "ments which are not mere colorable invasions of the "first."

In Winans vs. Denmead, 15 Howard, 330, often cited by complainant's counsel in other cases, and we expect it will be in this the thing patented was a car body made conical shape, &c. Before that time car bodies for carrying coal had to be made so strong that a car could not carry more than about its own weight of coal. The coal, in rectangular vertical car bodies would keep packing down wedging between the sides of the body from the constant jar of the car until the pressure against the vertical sides and ends of the body was enormous. By making the car body conical shaped the packing down and wedging of the coal was prevented and cars could carry very much larger loads. The car body, however, was a *single device,* and the Court applied the rule of construction to it as a single entire device. In this case the word *form* was used as referring entirely to *shape.* The *form* of the car body was its *shape,* and it was the shape of the body and the discovery of what new effects that shape produced that constituted the invention. This case is no authority whatever for the position that the form of an *operative combination of mechanism* includes *other forms of mechanism,* merely because both forms produce the same effects. We can properly speak of the form of two machines being alike, and also that other machines for doing the same kind of work are of another form. It would be perfectly right to speak of the Jensen form of can header and also, in contradistinction thereof, to speak of another machine as being of the Burpee and

Letson form of machine. It would be good English, we believe, to speak of one heading machine as being of the *intermittent form,* and of another as not being of the intermittent form, but as being of the *continuously operating* form. In neither of these cases would the term form mean shape as it did in the car body case.

We will now proceed to apply the rules of law fixed by the authorities to the complainant's testimony in this case. So far the complainant, both in taking its testimony and in its arguments, has asserted that the Jensen machine was the first one that ever successfully headed filled fish cans, and has in this way indirectly, if not directly, represented that the Jensen machine as an entire machine was the thing patented. We find this fallacy running through a great part of the complainant's testimony. The conclusion which it evidently hopes will follow, is that the Court will decide that the Jensen machine was the first one that would successfully head filled fish cans, and that if the defendants' machine will do the same work, that then the defendants' machine must be an infringement of the Jensen patent.

We therefore here remind the Court that there is no patent on the Jensen machine as an entire machine. The patent covers only sub-combinations of mechanisms which are contained in the machine. When the witness L. W. Seely, complainant's expert, was testifying, he, on cross-examination, was driven to stating the fact that the organization of the defendants' machine was different from the organization of the Jensen ma-

chine; he, for the evident object of showing that this organic difference between the two machines did not affect the complainant's rights *under the patent,* at once testified that his "statement should be taken with the qualification and explanation that in the Jensen machine, or rather in the Jensen patent,*there are no claims to the organization of the machine,* but that *each claim is devoted, to a part of the machine, to a sub-combination,*" &c. Record, page 224.

On the same page Mr. Seely admits that in his direct examination he had explained the *general operations and objcts* of the two machines *as entire machines for the purpose of making it appear that there was an infringement.*

We therefore urge that as the complainant has no patent that covers the Jensen machine as an entire machine that the evidence as to the merits of the machine as an entirety has no pertinancy or relevancy as competent testimony tending to show whether or not the claims for the sub-combinations had been infringed.

All that mass of testimony which extolls the Jensen machine to the higher elevations, should be disregarded. The Circuit Court in its opinion in this case stated the rule correctly, as we think. See page 440 of the record. But we also think that it did not apply the rule in making its decision for the reason that it seems largely to have based its decision upon the merits of the machine as an entire operative machine. See page 456 of the record, where the Jensen machine as an en-

tire machine is highly eulogized by the Court. The Court there says of the machine, "Its merits is such as to require liberality in construing these claims." etc.

THE JENSEN MACHINE WAS NOT A PIONEER MACHINE.

The Jensen machine, after all that can be said in its favor, was only a can heading machine. It put heads upon cans and it did not do anything else. We are leaving off its crimping mechanism as that is not involved in this case, and we speak of the heading apparatus alone.

In heading cans the Jensen machine used largely devices and apparatus which had been used in well known prior can heading machines. In its operation it did not produce the smallest fraction of any new ultimate result. It headed cans in a vertical position, but heading filled cans in a vertical position was a result that had been already accomplished. This result had doubtless been accomplished by hand and without any machine thousands of times. That cans had been filled with fish and then headed by hand is proved in the case and by the complainant's witnesses. Bradford swears to its being done. Record, pages 54 and 55. Robbins swears to it. Record, page 63. Munn swears to it. Record, page 269.

Of course the machine would head the can just the same whether there was fish in it or not. It would put a head on an empty can. It made no difference to the

machine whether there was any fish in the can or not.

What we are now showing is for the purpose of contrasting the Jensen machine with those machines called primary and pioneer in which the *ultimate result* produced by the machine was absolutely new, and was produced for the *first time in the world* by the machine itself; such as the Howe sewing machine, etc. We are not trying to invalidate the Jensen patent, but are getting at its proper construction. For this purpose we are showing that it was not a pioneer can heading machine.

The only ultimate result produced by the Jensen machine was that of heading cans by mechanism. This was not new either in whole or in part. This result was old and well known. The Jensen was not a pioneer can heading machine.

Neither was it the first machine that would head cans in a vertical position. The Marsh machine, which is described in the Marsh patent that is in evidence in this case as Exhibit A, did it. The patent is in the record, pages 256 and 257 and 535 to 539.

A full sized model of the Marsh machine is in evidence, as Exhibit F. Record, 334.

This Marsh machine is well explained by Mr. Burpee in the record from page 334 to page 336. On the latter page he testifies that he has just headed a can in the Marsh machine, *and that it would head full fish cans just as perfectly in all respects as the Jensen machine does or ever could.*

Another prior patented machine that is in evidence, and which headed cans in a vertical position, is that of E. Jordan. His patent is in evidence as Exhibit B. Record, pages 328 and 541 to 550.

This Jordan patent was issued in October, 1884, between three and four years before Jensen applied for his patent.

A full sized model of this Jordan machine is in evidence as Exhibit E. Record, page 329.

This Jordan machine is explained by Mr. Burpee as shown in the record from page 328 to page 334. While giving his testimony Mr. Burpee headed a can in the Jordan machine. Record, 329; and he explains the action of the machine, and its working parts, while it is going through the process of heading the cans, beginning on said page 329.

The Court will understand that we are not attempting to invalidate the claims of the Jensen patent which are sued upon. Those claims are limited to sub-combinations of devices, and such sub-combinations of devices are not in the defendants' machines and never have been. This is sworn to not only by Mr. Burpee, but also by both of the complainant's expert witnesses, F. E. Monteverde and L. W. Seely, as we will show more fully when discussing those claims. We are presenting the Marsh and Jordan prior machines for the purpose of showing the state of the art at the time that Jensen made his invention. We do this for the purpose

of showing that the Jensen machine does not belong to that class of inventions which the Supreme Court has classified as primary and pioneer, and to show that the complainant's assertions are not based upon fact.

Now in both the Marsh patent and in the Jordan patent the machines headed cans in a vertical position. The Marsh patent speaks of its machine as follows:

"The purpose of my invention is to provide a con-"venient device for heading cans. In packing goods "in open-top cans the cover must be placed upon the "can *after the can has been filled, and consequently "while it is in an upright position."* Record, 538. Here we have stated the subject matter, and the whole ultimate object that the Jensen machine was intended to accomplish. That very statement could have been put into the Jensen specifications and it would have been pertinent and it would have been a true statement of everything that the Jensen machine was expected or intended to accomplish, and *of every thing that the Jensen machine ever did accomplish.*

Not only this, but the Marsh *machine* actually accomplished the entire ultimate object that the Jensen machine accomplished. That ultimate object was the heading of filled cans in a vertical position.

Neither were the means used to accomplish this ultimate object so entirely new with Jensen. Jensen used a conical guide through which he forced the end of the can body into the flange of the head. Both the Marsh machine and the Jordan machine did exactly

this same thing. Both used conical guides through which the end of the can body was guided and forced into the flange of the can head. The Jensen machine had mechanism by which the end of the can body was forced into the can head. So did both the Marsh machine and the Jordan machine.

That the Jensen machine was differently organized from the Marsh and Jordan machines we admit, but while this is so, it is also true that he used, in planning and constructing his machine mechanism that operated in forcing the end of the can body into the flange of the can head substantially, and, we think we may truthfully say, exactly the same as did the mechanism of the Marsh and Jordan machine operate in guiding and forcing the end of the can body into the flange of the can head. In all the machines the ultimate object accomplished was the forcing of the end of the can body into the flange of the can head, and in all of the machines this ultimate object was accomplished by using a conical guide through which the end of the can body was rounded and guided into the can head flange, and in all the machines further mechanism was employed to force the end of the can body into the can head; all done while the can was in a vertical position. Besides all this, we remind the Court that the same general mode of operation was in many machines that were used for heading cans in a horizontal position. The application of the same mechanism for heading cans in a vertical position that had been used for head-

ing cans in a horizontal position was at the most but the application of the mechanism to a new use that was strictly analogous to its prior use. That this could not constitute any patentable invention is an elementary rule.

Curtis on Patents, sections 49 to 57, and 66; edition of 1867.

Further, the specifications of the Jensen patent show that he did not himself suppose that he was inventing an entire machine, or that he was originating a pioneer invention. His specifications say:

"My invention relates to a machine for capping and crimping cans; and *it consists in certain details of construction,* which will be more fully explained by reference to the accompanying drawings, &c. Certainly "details of construction" do not make a new machine nor a pioneer and primary invention.

The complainant's expert, Mr. Seely, describes the Jordan machine, but with a hostile sentiment running through his description. Still he states that in its heading operations a swinging horizontal swinging chuck carries upon its end a sectional chuck. That it is a stop motion machine. That the chuck is made in segments that move backwards and forwards towards and from the center. That there is a recess in the chuck in which the can heads are placed with the flanges down, with ledges underneath to hold them in that position while the can is being headed, and that below the recesses there is an inclined or hollow or conical guide which

directs the upper end of the can bodies into the flange of the can head.

He testifies that the arm which carries the chuck swings back and forth and moves up and down. That the chuck grasps a can head which has been placed by hand upon a boss on a revolving disk D. That the swinging arm and chuck then rise and swing back to a position over another disk on which the cans have been placed in a vertical position. The swinging chuck is then made to descend and force the can head upon the can body. The jaws of the chuck then open and the swinging arm and chuck then rise, a spring plunger within it keeping the headed can from rising with it, and acting as a releasing device for the headed can. That in the Jordan patent there was mechanism for automatically opening and closing the chuck.

Record, 258 to 261.

On page 260, he testifies that the swinging arm and chuck of the Jordan machine "only did what had formerly been done by the bench headers operated by foot power." This shows how very common was the use of the conical guide for conducting the upper end of the can body into the flange of the can head in the heading of cans. We think that this use was so common that we might fairly ask the Court to take judicial notice of it, and also take judicial notice of the fact that in its use in bench headers, or, what is the same thing, its use in foot headers, the cans were headed in vertical position.

In Mr. Burpee's testimony he describes the operation of the Jordan machine. Record, pages 328 to 334.

He put a full sized working model of the Jordan machine in evidence as Exhibit E. The model is made largely of wood, but it shows the full operation of the machine. Mr. Burpee headed a can in the model and he explains the operation seriatim. Record, 329-330.

In heading the can its upper end was guided into the head by a conical guide. The can was in a vertical position. If it had been filled with fish it would have been headed just the same. The can was kept in a vertical position all the while that it was being headed.

The conical guide of the Jordan patent is there called a segmental clamp chuck, and is marked m. It is shown plainly in figures 16 and 19. Figures 13 and 14 show a plain view of the same. Record, 332.

In the Jordan machine the can is not raised to receive the cap but the cap is forced down upon the can. When the segmental clamp chuck was swung around by the arm A, over the can head the chuck was open, and was sufficiently enlarged to pass down outside of the can head. After it descended upon the cap it was closed to grasp and hold the can head. It was so closed by the mechanism of the Jordan patent and it then formed a conical guide that would force the upper end of the can into the can head. Record, 333.

When the chuck was closed there was a seat formed which received the lower edge of the can head flange

and held the can head in position. All of these things are fully described in the Jordan patent. Record, 334.

Mr. Seely tried to make a point by saying that the Jordan machine has no automatic feed beyond a set of disks upon which the heads and cans must be placed by hand. Record, 259. Admitting this to be true, the fact remains that those *disks are automatic feeding disks,* and it is also true that in the Jensen machine and in the defendants' machines the cans and heads must be placed *by hand upon their feeding devices,* which are the feeding belts, and the Jensen inclined chute for the heads.

The witness Robbins seemed to think that the Jensen machine received the filled cans automatically from the Jensen can filling machine. Record, 64. But in this he was mistaken. The filled cans were taken *by hand* from the can filling machine and slammed down on their bottoms to settle the fish down more in the can, and then they were placed by hand on the feeding belt of the Jensen machine. One man did nothing else. Record, pages 358 and 359.

The complainant's witness William Munn, who has been actively connected with the business for many years and had an actual and intimate knowledge of the entire process of packing salmon, swears that in practice the cans do not pass from the can filling machine to the feeding belt automatically. That when the cans are filled with the fish they are in a horizontal posi-

tion. The fish inside of it is stiff enough *so that it will not run out.* Record, 283. The cans are not always well filled and are therefore examined, before they are placed on the feeding belt, to see if they are well filled, and when they are not they are placed one side. When the can goes down from the can filler "a man has got to take it from a horizontal position, and he has got to put it in a vertical position," and, "that is all the man does; that is what he is there for; he takes this can from a horizontal position and puts it on the belt in a vertical position," etc .Record, page 283. See also pages 284 and 285 for still further facts on the same point.

Mr. Robbins was simply mistaken in his testimony. The complainant's feeding belts in the Jensen machines were themselves fed by hand.

Mr. Seely also describes the Marsh machine, which he says is a *foot machine* for heading cans in an upright position. That it has a hollow conical guide for guiding the upper end of the can into the can head. Also a seat or ledge for the flange of the can head to rest upon when the jaws ar closed and while the can is being forced into the jaws, and also a plunger that operates to drive the head upon the can body.

The testimony of Mr. Seely agrees with that of Mr. Burpee shown in the record, pages 334 and 337, as far as it goes. The said testimony of Mr. Burpee is much fuller. Both show that the Marsh machine headed

cans in a vertical position and that it would head filled fish cans:

"Just as perfectly in all respects as the Jensen machine does, or ever could." Record, page 336.

Without pursuing this particular subjct further we respectfully submit that, whatever merit the Jensen machine may have had, either as an improvement on other prior machines, or as an improved machine, it still was not the first machine that ever headed cans. Neither was it the first machine that was used to head cans in a vertical position. Neither was its most important features, viz: the conical guide with its opening and closing slides for first receiving and holding the can head when the slides were closed, and then by opening the slides releasing the can head, with mechanism for automatically opening and closing those slides, new in the Jensen machine. In short it was not a primary or pioneer machine, or the production of a primary or pioneer invention or discovery.

We further believe that we have shown that the Jensen patent does not cover an *entire machine,* and that therefore the question as to whether the defendants' machine as an entire machine involves the principle and mode of operation of the Jensen machine is not a material question in this case. At least it is not a material question any further than such fact may tend to show whether or not the combinations of the claims sued on, or some of them, are in the defendants' machines. It is not a material question for the purpose of

deciding whether or not the defendants' machine would be an infringement of the complainant's patent if that patent claimed the Jensen machine as an entire machine, and as the first machine that ever accomplished the result of heading cans in a vertical position or at all. A comparison, however, of the machines as entire machines may be proper, for the purpose of showing whether or not the combinations of the claims sued upon are in the defendants' machines. If the comparison of the two machines as entire machines proves that the combinations of the claims sued upon are not in the defendants' machines and could not be placed in defendants' machines without destroying their operation, such comparison is proper. But, if the comparison is made for the purpose of *jumping over the claims sued upon* and asking for a decision that could only be made by comparing one machine with the other, *ignoring the limitations of the claims* sued upon, and holding that, if the two machines do the same work, infringement follows without regard to the differences in the mechanisms employed, then we say, that the comparison for such purpose is improper, for the reasons that the Jensen patent does not cover the machine as an entire machine; and also because the Jensen invention is only a modification of well known can heading machines, and does not fall within the category of primary discovery, or pioneer inventions, as those terms are used by the Courts in classi-

fying, and distinguishing between, the different grades of discoveries and inventions.

We will now proceed with an examination of each one of the several claims which are alleged to be infringed, following the order pursued by complainant's counsel in the examination of his experts.

The first claim of the patent sued on is claim one. It is as follows:

"An endless traveling carrying belt, a stop, E, extending across it to change the direction of the cans, "and arms swinging over the belt,whereby the delivery "of the cans from the belt to the feeder is rendered "exact, substantially as herein described."

Of course this is a combination claim, and its mechanical elements are:

1. The endless traveling-belt.
2. The stationary stop E.
3. Arms swinging over the belt. Unless each and every one of these three elements are in the defendants' machine the claim is not infringed.

The defendants' machine has the endless traveling carrying belt. This we admit. It also has fingers for regulating the travel of the cans on the belt to the feed wheel 36. These fingers, however, are very unlike the swinging arms of the Jensen patent. But we deny most emphatically that the defendants' machines have the stationary stop E, which is one of the most prominent

of the mechanical elements of the combination of the first claim of the complainant's patent, or any equivalent thereof.

The complainant's experts testified without ever having seen the machines at work and they have drawn on their imaginations, and strained every nerve to make out that the constantly moving sides of the defendants' revolving feed wheel 36, constitute mechanical equivalents of the stationary stops E, of said claim one.

Mr. Monteverde, one of the complainant's experts, to make the description of the machines of the two patents more lucid, has made thirteen drawings which are put in evidence, each one being marked "Complainant's Exhibit Montervede Drawing," and adding to each of the drawings its respective number. They are in the Record, pages 493 to 505. Their numbers are: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 10a, 11 and 12.

Of these drawings numbers 1, 2, 3, 4, 5 and 6 represent various parts of the Jensen patented machines, and the other numbers represent various parts of the defendants' machines.

Of these drawings, No. 1, page 493, is made to represent the combination of said claim 1 of the Jensen patent. It is made from the drawings of the Jensen patent and is like those drawings, except being somewhat enlarged. The drawing has two figures. See record, page 75.

Beginning on page 72 of the record, Mr. Monteverde gives a general description of the Jensen machine and its operations and the operation of its various devices and combinations.

Beginning on page 74 of the same, he describes the stop E, and other matters. On page 74 is described the feeding device F, and from page 75 to page 78 are further descriptions of said drawing No. 1.

The cross-examination of this witness regarding said first claim is in the record, from page 138 to page 156. Upon this testimony as well as that of the complainant's other expert L. W. Seely we think we could safely rest our case. The facts which they state show that there has been no infringement, and wherein they state opinions that conflict with the facts, their opinions are so manifestly absurd that no Court would give them any serious consideration in deciding the case. The said cross-exaimnation of Mr. Monteverde well illustrates this.

On page 138 the witness says that the stop E is one of the elements of said claim 1. On the next page he states that the cans travel on the carrying belt until they are stopped by the stop E, and that after they are so stopped they are taken by the feeder F, and carried off of the belt. This is correct and shows that the stop E is a device that comes between the carrying belt and the sweeping feeder F, with its arms H. The witness asserts that part of the outer periphery of the defend-

ants' revolving feeder 36, lies directly across the path of the can as it is carried inwards by the traveling belt and holds it there until in the further revolution of this feeder 36, one of its concave cavities, or pockets as we have called them, marked 36a, comes along and takes the can and removes it from the belt and carries it along in its course towards its delivery on to the can support 19. Record, 141. This can support 19, as it is called in the defendants' patent, the witness chooses to call the plunger 19. This is a misnamer, and is obviously applied so as to make it, in name, resemble the plunger S, of the Jensen patent. The misnomer is without warrant.

The witness admits that the edge of the revolving feeder 36 is a part of the feeder itself. He also admits that there is no stop between the belt and the feeder 36. He says that "*The actual stationary stop is not there,*" but claims that in place of it the outer face of the rotating carrier 36. Record 141 *et seq.* On page 142 the question is asked the witness:

"Then the stop E, which is put in the complainant's patent to stop the cans on the belt before they come in contact with any part of the feeder F, is not in the defendants' machine at all, is it?" and the answer is, *"It is not."*

On page 144 this witness says that the defendants' feeder is so constructed that *it does not require* any stationary stop like the stop E of the Jensen machine.

On and after this page 144 the witness asserts that the side of the revolving feeder 36, of the defendants' machine, does in fact bring the can to a standstill on the belt before it is carried away from the belt in the pocket 36a of the feeder. In this statement he is proved to be in error. The witness had never operated or seen operated either the Jensen machine or the defendants' machine, and has no practical knowledge of either. Record, page 121.

The operation of the defendants' machine that is in evidence proves that the can body does not stop its forward motion from the time that it has passed the spacing fingers over the carrying belt until it is discharged, headed, from the machine. To make this fact certain and beyond question we put the defendants' machine, Exhibit C, in evidence, and had the defendant Burpee make a full explanation of it and its operations throughout. Record, pages 290 to 295.

Burpee explains stop E of the Jensen patent, and testifies that there is no stop of that kind in defendants' machine. On page 299 a full sized working model of the Jensen machine is put in evidence as Exhibit D, with the numbers pasted on the various parts of the machine, the same as in the Jensen patent.

On the said page 299 and the following pages the witness demonstrates that the Jensen machine could be operated without the stop E in it. He does this by taking the stop E out of Exhibit D and heading a can

in it without the stop in it. In such a case the can was carried on the belt until it came in contact with the feeder F, which stopped the can, until, in its sweeping movements, it carried the can off of the belt and one step forward, leaving it there until the further sweeping movement of feder F carried it still another step further along, following the same number of forward movements, until the can was headed, that was followed when the stop E was in the machine. The movements of the can were of greater length forwards and backwards in the direction parallel with the belt when the stop E was out than they were when the stop was in the machine.

This certainly proves that the stop E is a device that is in the Jensen patent, and that its place and operation is between the carrying belt and the feeder F, which carries the can off and away from the belt. That there is no kind of stop of any nature whatever between the carrying belt of the defendant and the feeder which carries the can from off the belt is beyond any doubt whatever. In the defendants' machine there is no device of any nature or kind between said belt and said feeder 36.

Monteverde so swears. Record 141. Seely so swears. Record 237 to 243. Burpee so swears. Record 303 and 304. On pages 303 to 305 Mr. Burpee swears positively that the stop E, of the Jensen patent, has never been in any of the defendants' machines nor any equivalent of it, and that the combination of said claim one of

the Jensen patent is not in the defendants' machines, nor has it ever been in any of them. His cross-examination strengthens these statements. Record 374 *et seq.*

We think it is obvious that no rigid stationary stop could be put over the carrying belt in the defendants' machine without destroying the operation of the machine. The can must be allowed to travel forward on the carrying belt until it reaches the bottom of the pocket 36a, which is at the back end of each of the four sides of the skeleton feeder wheel 36. As this pocket and the can come together, the forward movement of the belt carrying the can blends with the new side circular movement of the pocket, and the can, without ceasing its movements, is carried away from the belt. Evidently if a stationary rigid stop of the character of said stop E was interposed to stop the forward movement of the can, the can could not get into the bottom of said pocket, and the heading operation of the machine would be broken up. Even in the Jensen machine the feeder F could not be used if it had a circular motion like the defendants' feeder wheel 36.

The complainant's feeder F, could not be used in the defendants' machine, nor could the feed wheel 36 of the defendants' machine be used in the Jensen machine. This fact is not only obvious, but the witness Seely so testifies. Record 243.

Monteverde swears to about the same thing. He testifies that the arms H are necessary elements of Jen-

sen's feeder F, and that neither those arms H, or the stop motion of the Jensen machine are in the defendants' machine, and he does not see how the feeder F could be incorporated into the defendants' machine without destroying its action. Record 157 and 158.

But further than this, the side of the feeder 36, does not stop the can, at any time or place.

There are four sides or edges to the feeder 36, in the defendants' machine. Each one of these sides is formed in a sort of double circular line, and the part of the side where the can first comes in contact with it, is farther from the central axis 15 around which the feeder revolves than are the other parts of the side against and along which the side of the can slides, as it remains upon the carrying belt which keeps pushing the can against the feeder's side until the pocket, 36a, of the feeder takes the can and carries it off the belt. The consequence of this shape of the feeder's side is that the can keeps on moving forward and under motion all of the time that it is on the belt. By actual test and measurement the can moved forward one inch and three-quarters while it was in contact with the side of the feeder.

Because the experts Monteverde and Seely had given it as their opinion that in the defendants' machine the can was stopped on the feeding belt for a moment of time, when it came in contact with the edge of the feeder 36, Mr. Burpee, while on the witness stand, headed a can in the defendants' machine, and proved

by actual demonstration that the can did not stop but actually moved forward one inch and three-quarters after it came in contact with the edge of the feeder 36, and that it did not stop at all. Its forward motion was retarded but not stopped. No attempt was made to contradict this demonstration, but we believe that it has been acquiesced in by the complainant's counsel. It has not been asserted that the cans made any stop on the defendants' feeding belt since said demonstration which was made in Mr. Seely's presence.

Record pages 302 and 303. On the last page, 303, Mr. Burpee testifies that the witnesses Monteverde and Seely were mistaken in their statements made to the effect that the cans were stopped on the defendants' feeding belt. It was mere guess work with them, as neither of them had ever seen the machine work at the time they gave their testimony. Mr. Monteverdeswears that he had never seen either the Jensen machine or the defendants' machine operate. Record page 121. Mr. Seely also swears that he had never seen either of the machines operate. Record page 223. Later, at the said demonstration Mr. Seely did see it operate, and he has not since, to our knowledge, asserted that the cans did stop on the defendants' feeding belt. This fact destroys so much of the opinions of said experts as was based upon their belief that the cans did so stop.

The testimony on the said pages proves positively and conclusively that the can does not stop in the defendants' machine while it is in contact with the edge

of the feeder 36; that the can during such contact moved forward one and three-quarters inches; that both the complainant's experts, Monteverde and Seely, were mistaken in their opinions to the effect that the said feeder 36, did stop the can for an instant of time, and it also shows that the defendants' machines never have had the stop E, of the Jensen patent in them nor any mechanical equivalent thereof.

We think that the testimony of Mr. Seely also proves that the stop E is not in defendants' machines. Mr. Seely was one of the complainant's experts, and was doing all that he conscientiously could to make out an infringement against the defendants. Still he stated facts as to what was described in the complainant's patent as to what the defendants' machines contained as the same were described in the defendants' patent and in the testimony.

On pages 236 and 237 Mr. Seely testifies that the edge of the feeder 36 is not concentric with its center, which is the spindle of 35. Also that that part of the edge of the feeder which is over the belt is moving slightly forward lengthwise of the belt. The can of course follows this forward motion while it is in contact with the edge of the feeder.

Mr. Seely testifies that complainant's claim that the rotating feeder 36, of the defendant's patent is the thing that corresponds to the Jensen feeder F. Yet that in the Jensen machine the fixed immovable stop E, comes

between the carrying belt and the feeder F. That the stop E, is no part of the feeder F, or of the feeder frame. Also that in the defendants' machine there is no stop that comes between the carrying belt and the feeder or feeder frame. Record, 247 to 243. On page 243 of same Mr. Seeley states that it would be "absolutely impossible to take the feeder out of defendant's machine and put it into the plaintiff's." It is equally certain that the sweeping feeder of the Jensen patent could not be used in the defendants' machine.

We think that we have shown by the testimony beyond a doubt that the stationary stop E, of said claim I of the Jensen patent is not in the defendants' machine and never has been, either as shown in the patent or in any equivalent form. If we are correct in this, then the defendants have not used the combination of said first claim, and have not infringed it.

It would seem to make no difference whether the feeding fingers of the defendants' patent and machines are the mechanical equivalents of the swinging arms of the said claim 1 or not, since the combination has not been used by the defendants, even if the said spacing fingers used by defendants were exactly the same as the Jensen swinging arms. As none of the other claims of the Jensen patent which are asserted to be infringed have the said swinging arms as one of their mechanical elements, it is immaterial so far as any of those claims are concerned whether the spacing fingers of the de-

fendants are, or are not, different from the said swinging arms.

Still, that they are different is shown by the testimony found on the following pages: 322, 324, 325, 371, 372 and 373.

They are not actuated the same nor by the same kind of mechanism.

The next one of the complainant's claims which is asserted to be infringed is claim 3. It is as follows:

"In combination with a transverse belt, the *feeder having the projecting arms* between which the cans are received from the belt and the *actuating devices* by which the motions of the feeder are produced, substantially as herein described."

The feeder of this claim is of course the feeder F.

The defendants' machine does not have the feeder F, nor any feeder having projecting arms between which the cans are received from the belt, nor does it have the actuating devices, nor any of them, by which the motions of the feeder F are produced. To make any pretense that the defendants' machines or any of them infringe the foregoing claim is as monstrous as it is absurd and ridculous. There is no feeder having the projecting arms between which the cans are received from the belt in the defendants' machines and never has been. No device or devices of the defendants' machine performs the operation that the feeder F performs or that has its motions produced by the actuating devices that

produce the motions of feeder F. The feeder F has a sweeping circular movement peculiar to itself. It does not have an axis of its own around which it revolves. It does not revolve around a center of its own. Its actuating devices are the cranks JJ and I. With these cranks actuating the feeder it could not possibly revolve around its own center. The defendants' feeder, the wheel 36, which is claimed to be the equivalent of the Jensen feeder F, does revolve around its own axis—its own center, the shaft 35. To put the cranks JJ and I, in the defendants' machine, and make them actuate the feeder 36, would at once destroy the whole operation of the defendants' machine, and make it fit for nothing but the junk pile.

On the other hand, to put the shaft 35 in the feeder F of the Jensen machine and make the feeder turn round its own center would destroy its action, and the Jensen machine would also be of no use except for junk.

On pages 161 and 162 of the record, Mr. Monteverde swears that the actuating devices of said third claim of the Jensen patent are the crank I and the other cranks JJ, and they operate the Jensen feeder to give it the sweeping motion. *That those devices are not in the defendants' machine* for operating its rotary feeder 36. That the defendants' machine has actuating devices for operating its rotary feeder 36. *That the actuating devices of the Jensen patent are not in the defendants' machine.* That the actuating devices that actuate the de-

fendants' rotary feeder 36 are the gears 31 and 39. That those are not the devices that actuate the Jensen feeder F. That there is nothing in the defendants' machine that operates as do the actuating devices that move the Jensen feeder F, by stop motions, and that those actuating devices of the Jensen patent are not in the defendants' machine at all.

An inspection of the defendants' machines, and a comparison of them with the Jensen patent, shows that the foregoing statements of Mr. Monteverde are true. In view of these facts, it is idle to talk about any use being made of the said combination of said claim 3 by the defendants. The defendants' machines never have had any feeder with the projecting arms between which the cans are received, nor the actuating devices that operates the Jensen feeder, and of course said claim 3 has not been infringed.

On pages 249, 250 and 251 of the record, Mr. Seely testifies that *Jensen's actuating devices could not be put into the defendants' machine and operate their feeder or any part of their feeder.* That this could not be done because one is a rotary feeder and the other is an oscillating or swinging feeder. Also that the devices which actuate the defendants' feeder 36 *could not be put into the Jensen machine and have it operative.* That it would be impossible to interchange the feeder-actuating devices of the complainant's and defendants' machinery, and tells why this could not be done. We think

there is not a shadow of an excuse for claiming any infringement of said claim 3.

Both of said claims, one and three, being combination claims, and each including within its combination mechanical elements which are not in the defendants' machine, neither has been infringed; and this was so decided by the Circuit Court.

The next claim which is asserted to be infringed is claim 5 of the Jensen patent. It is as follows:

5. The *inclined chute* into which the caps are placed and a stop extending across said chute, so as to prevent the caps from moving downward, in combination with a trigger extending across the path of the cans as they are moved toward the capping table, said trigger being connected with the stop, so that as it is moved backward by the passage of the can it withdraws the stop to allow a cap to move down the chute, substantially as herein described."

This claim is intended to cover the combination, or rather a part of the combination of mechanism, by means of which the caps, or covers, are fed into the machine and conducted to their position over the can so as to be in a position to receive the upper end of the can body when the can body is raised and forced into the head. The fundamental foundation device in this combination is the *inclined chute.* Without this inclined chute for the can heads the remainder of the mechanism would be entirely useless.

The power that makes the operation of the inclined chute possible is the power of gravity. Until the cap reaches the spring R, near the bottom of the incline of the chute, it is carried along by the power of gravity alone.

This inclined chute is very defective in many particulars. The cap in descending it must be in an inclined position. Before it can be placed in its position in the conical hollow guide its inclined position must be changed to a horizontal position. To make this change and get the head into its last position over the can body requires the complicated mass of mechanism that is shown in the patent. The caps sliding down the incline must first be stopped. Then they must be again moved until they are aagin stopped by the second spring, R. Again, it has to be forcibly moved forward by means of the forked lever V. To operate these springs and forked lever there is used a quantity of devices, which, although explained in the patent, are somewhat difficult to understand therefrom.

The feeding apparatus for the *cans* in the Jensen patent is entirely unlike its apparatus for feeding the *can heads* to the machine.

The defendants' apparatus, on the other hand, for feeding the can heads to the machine is precisely the same as that used for feeding the can bodies to the machine. The can bodies are fed to the defendants' machine by means of the horizontal belt 59, and the horizontally revolving skeleton wheel 36. The can

heads are fed into the defendants' machine by means of the horizontal belt 69, and the horizontally revolving skeleton wheel 37. The skeleton wheels 36 and 37 are both carried by the vertical shaft 35, and revolve with it, and of course they both revolve alike. Both are also of the same shape, and both alike have the pockets, one for taking and carrying forward the can bodies, and the other for taking and carrying forward the can heads.

While the spacing fingers are not a necessity in the defendants' machines they have been used in many of their machines, and when used the spacing fingers for the heads are precisely the same as the spacing fingers for the can bodies. Record 316 and 317.

Defendants have made and sold several of their machines without any spacing fingers in them at all, and those machines have done just as good work as any. All that is necessary when the spacing fingers and the bracket 86 are taken out of the machine is to keep the machine filled with cans and caps, since it is possible for a straggling can or cap to get caught between the most projecting corners of the feed wheels 36 and 37, and the outer rims against which the cans or caps slide as they are carried around in the feeder. Record 323 and 324.

Also, evidence of James Fowler. Record 363 and 364.

Mr. Burpee explains the mechanism and action of the defendants' machines well, and his descriptions are

believed and accepted as correct by both sides, and no attempt was made to contradict his evidence at all. He testified for the defendants, and no rebutting evidence whatever was offered. Not a witness was sworn in rebuttal. His direct testimony for the defendants is in the record from page 290 to 369, except a few pages that contain the testimony of James Fowler. The cross-examination of Mr. Burpee goes from page 369 to 430. His redirect examination is on pages 430 and 431. We will ask the Court to read this evidence from the record, instead of our undertaking to copy it at an unnecessary length in this brief.

We suggest that a very good way to test the question to whether or not the combination of Jensen's claim 5 is in the defendants' machine is to reverse the order of the examination, and first examine the simple feeding apparatus of the defendant, and see if any of the defendants' apparatus can be found in the Jensen patent. The defendants' apparatus for feeding the heads is very simple and is easily understood, while Jensen's is very complicated and is more difficult to understand.

In feeding their caps to the machine the defendants first put them on to the horizontal feeding belt 69. Jensen has not this horizontal feeding belt, nor anything that operates in the same manner, or in substantially the same manner. The caps cannot slide down the belt, because it is horizontal and *gravity* will not work in it. No gravity as an operative working power is, or can be

incorporated into it, or the cans that it carries, at all. On the contrary, the cans are carried along by the belt. The *belt is a moving carrying device,* and it has to be driven by a mechanical power *applied by mechanism.* It is the same apparatus that is used for feeding the filled cans into the defendants' machine.

Jensen on the other hand uses an inclined chute to begin with. This chute is not horizontal, as is the defendants' belt. The chute does not move as does the defendants' belt, but is fixed and stationary. It does not carry the cans along with itself, but allows them to slide downwards by the force of gravity with whatever speed their weight and the incline may urge them to.

The complainant and its experts contend that the defendants' belt is a mechanical equivalent of the Jensen inclined chute, but we think that there is ample evidence in the mechanism of the two machines to prove that this is not the case. If the belt is an equivalent of the chute, why is it that the defendants' cap feed wheel 37 cannot be used with the chute? Why is it that the mass of complicated machinery that is required in the Jensen machine to get the can head into its position over the can body, is not used, nor any equivalents of it, in the defendants' machine? Surely it will not be pretended that the defendants' feed wheel 37 is a mechanical equivalent of any device, or any number of devices that can be found in the Jensen patent. On page 314 of the record, Mr. Burpee names no less than nine specific devices that are used in the Jensen machine to meet the difficulties that are encountered in changing th incline of the heads, while going down the

chute, to a horizontal position, and getting them into their proper position over the can body. See the nine pages of Burpee's evidence respecting said claim five, in the record from page 312 to page 322.

But gravity and mechanical devices are not mechanical equivalents of each other. This was decided by the Supreme Court in the case of Wicke vs. Ostrum, 103 U. S. 461, pages 469 and 470.

Wicke had invented a machine for driving nails. The machine was a new one and the Supreme Court says that he was "enittled to the benefit of all mechanical equivalents of his several elements known at the time of his invention, if used in the same combination." See page 469 of the decision.

The defendant Ostrum made a nail driving machine in which the nails were driven in a horizontal position. They were "laid in a groove and *held there by gravity* until forced into the board." He was thus enabled to dispense with two of Wicke's mechanical devices. The Court says, page 470: "He accomplishes by *natural causes* what Wicke required a mechanical contrivance to do."

The Supreme Court decided that there was no infringement. The entire opinion in this case is very interesting.

A very prety and correct definition of what constitutes a mechanical equivalent in patent law is given in the case of Jensen Can Filling Machine Co. vs. Norton, 67 Fed., on page 239. The decision was by this Court of Appeals. It says: "'Mechanical equivalents,' as "that phrase is to be understood in this connection, are

"such devices as were known previously, and which, "in the particular combination of devices specified as "constituting the patented invention, can be adapted to "perform the functions of those specified devices for "which they are employed as substitutes without chang- "ing the inventor's idea of means. In other words, "without introducing an original idea, producing as "the result of it, an improvement which is itself a pat- "entable improvement."

Applying the tests furnished by the above definition of mechanical equivalents, we think the solution of the issue as to whether or not the traveling horizontal carrying belt was or was not a mechanical equivalent of the stationary inclined chute of Jensen is easy.

First, what was Jensen's idea of means for feeding the cap into the machine and getting it into its position over the can body? Evidently, the means which his idea worked out and covered were those described in his patent and applied to the machines which he built.

The inclined chute was only one of them. It was only one device, although the principal one, in the combination which he adopted as the means for obtaining the result for which he was working. His means involved and included all of that complicated mechanism through which he succeeded in getting the cap into the machine and into its final location over the can body. True, the claim does not cover all of those means in the actual combination which are used and are necessary to its working. Still the specific combination of devices which the claim does cover are a portion of the entire means employed, and the inclined chute was his

foundation device in the means which he employed. All the others were necessary in order to make the chute effective. While we are testing the question of what would or would not be a mechanical equivalent of the inclined chute, we must remember that nothing could be an equivalent of that chute unless it could be substituted for it in that mass of machinery which made the chute effective and without which the chute was worthless. The whole mechanism constituted Jensen's idea of means. Could the inclined chute be taken out of those means and the horizontal traveling belt be substituted for it, and the new combination be effective? We all know that this could not be done, and the testimony shows beyond a doubt that it could not be done. To put in the belt and make it effective not only must the inclined chute be taken out, but nearly all, or quite all, of the accompanying mechanism that constituted Jensen's idea of means must go out with it,*since that mechanism could not be used as part of the machinery that would work in connection with the belt.* All, or nearly all, of that mechanism would work, and did work, and assist the operations of the chute, but it would not work and do anything in connection with the horizontal belt.

But beyond this it is proved that the defendants' idea of means created a new and patentable invention. The defendants obtained and now have a patent for the combination of means which they work out to a successful result. See claims sixteen and seventeen of defendants' patent.

This patent is evidence of a new invention by the defendants. Besides this, Mr. Burpee testified that the application *of a belt* for feeding can heads to a can heading machine *was new with the defendants.*

Record 315.

Obviously, Jensen knew well what a carrying belt would do, as he used one for carrying his cans into the machine. But he did not know or have any conception of any mechanism that would act in connection with the belt to get the caps into their final position over the can body. The belt alone would not do this. It does not do it in the defendants' machine. The defendants must use with the belt the feeder wheel 37. Jensen had no idea of such a thing as the defendants' feeder wheel. If he ever thought of the belt as a part of the means for getting the cap into its final position he rejected the idea. The belt, though well known to Jensen as a carrying belt, formed no part of the means which he adopted. Before the belt could be used something new had to be discovered that could be combined with the belt to carry the cap to its final position. A new invention had yet to be made or the belt could never be used for carrying the caps into the machine. *The defendants, and not Jensen, made that new invention, and for the first time in the world made it possible to use the belt for getting the caps into the machine.*

According to the idea of law, which the complainant's counsel has so often claimed in many cases, in this and the Circuit Court, this invention of the defendants would be a primary and pioneer invention. The application of a horizontal belt with necessary accompany-

ing mechanism *by means of which the belt could be used for feeding can heads* into a heading machine *was new with the defendants. It had never been done before.* It doubled the capacity of machines that were used for heading cans in a vertical position. *Doubling the capacity of vertical heading machines was obtaining a new result, never before known,* and was invention.

Loom Co. vs. Higgins, 105 U. S. 580, pages 591 and 592.

Walker on Patents, Sec. 26.

The defendants' machine comes quite as near to being a primary and pioneer invention as does the Jensen.

Every test that would tend to make the Jensen machine a pioneer invention would equally make the defendants' a pioneer invention. It was new; it produced a new result never before produced; and its mechanism was new, as were also its combination of mechanisms.

Jensen's inclined chute cannot be used in any known combination in which a belt can be used, and neither can a belt be used in any known combination in which the inclined chute can be used.

We submit that the horizontal carrying belt for caps, and the inclined chute are not mechanical equivalents of each other, and that this is proved by every legitimate test that is known to the law for determining what is, and what is not, a mechanical equivalent. Of course, if it is decided that the horizontal traveling belt is not the mechanical equivalent of the inclined chute, the defendants have not used the combination of claim five, and it makes no difference whether the spac-

ing fingers and bracket 86, with their connections, are or are not the same mechanism as are the trigger N, and stop P, of the Jensen patent. The claim does not include all of the mechanism that is necessary to make the trigger N, and stop, operative. Just the trigger N, and stop, taken alone, by themselves, do not constitute an operative mechanism. The "upwardly projecting arm O" of the patent is a device that intervenes between the trigger N, and stop P, and the trigger operates the stop, only by means of the said intervening arm. Leave out the arm O, and there would be no connection whatever between the trigger N and the stop P. Applying the strict legal rules, we might claim that said claim five is void for the reason that it does not cover an operative mechanism. Not only is the arm O a necessary element to make the mechanism operative, but so also is the spring of the spring arm P, which operates to throw the spring arm, or stop P, backwards after it has been moved forwards by the arm O. Without this spring, when the stop P had been moved forwards to stop the cans, it would remain there, and no more caps could pass into the machine.

When all the additional elements are read into the claim that are necessary to make an operative combination of it, there appears quite a wide difference between the bracket 86, and spacing fingers of the defendants and the combination of claim five. Mr. Burpee tells of further differences.

Record 322, 323 and 324.

The fact, as shown in this testimony, that the defendants' bracket, 86, and their spacing fingers can be

taken out of the machine without destroying or perceptibly injuring its utility, we think assists to show that they are not the same thing and do not operate in the same general combinations of mechanical elements as does the apparatus of Jensen's.

We submit that the defendants have not infringed claim five of the complainant's patent, for the reason that they have not used the inclined chute, nor any equivalent for it. Also, because the claim is void for not covering any operative combination of mechanism, unless additional mechanical elements, necessary to make an operative mechanism, are read into the claim, and when such additional elements are read into the claim, then the claim has not been infringed, not only because the defendants' machine does not have the inclined chute or any equivalent thereof, but also because it does not have the other elements of the combination of said claim five.

The Circuit Court had very little to say as to said claim five. It was proved in the case that the defendants' machines would work just as well without the spacing fingers for the can heads as with them when the belts were kept filled with can bodies and can heads. It is a fact that the defendants are now making and selling the machines without using any of the apparatus called for in claim five, and therefore the Court was right in concluding that the issue of infringement of claim five was not of vital consequence. Still we are not satisfied with its conclusion that the defendants had infringed said claim five. The inclined chute is the vital element of the combination of claim five. Take

out the inclined chute and the whole combination is gone, and what remains is absolutely useless for any purpose whatever. The object of the combination is to advance the can heads forward so as to get them nearer to the can body. The inclined chute is the viaduct, and the only viaduct, through which the can heads can make any part of that advance. Without the advance made by the can heads through the inclined chute not a single head could reach a single can body and not a single can could ever be headed.

But further than this, the chute itself would be entirely ineffective and worthless if the incline were taken out of it. Take the incline out of the chute and not a single can head could be advanced or a single can ever headed in the machine. Not ony is the inclined chute the vital element of claim five, but the incline of the chute is its soul and is the one feature of it that gives it any vitality whatever. Take the incline out of the chute and it is at once a dead stop to the heading of cans in the machine. The chute is not a piece of moving mechanism, but is a mere stationary slide down which the heads move by their gravity. In and of itself it does nothing whatever.

The inclined form is of the essence of the Jensen chute. It would not be effective in any other form than the inclined form. We challenge complainant's counsel to show any form which could be given to the chute, in place of its inclined form, without utterly destroying its effectiveness, and, in fact, destroying the whole operation of the machine. The inclined form of the Winans car body was the one and only

feature which gave it its value. The inclined form of the Jensen chute is the one and only thing that gives it its value. In this case form is of the very essence of the chute, as it was of the car body. Not only is the horizontal traveling belt for carrying the can heads into the machine a very different device in and of itself from the Jensen inclined chute, but the necessary connecting mechanism that is used by Jensen with it is so very different from anything in the defendants' machine as to demonstrate the fact that the belt could not be substituted in the Jensen machine in the place of the inclined chute, and also that the inclined chute could not be substituted for the carrying belt in the defendants' machine.

The heads must be transferred from the viaduct by means of which they are fed into the machine to their position over the can body which is to be forced into them. For performing this duty the defendants use a horizontally revolving cap carrying wheel, which is precisely the same in shape as their can carrying wheel underneath it. Both are carried by the same vertical shaft. Record 317 and 318.

Both of these wheels were the invention of the defendants. There is nothing in the Jensen machine that approximates the defendants' arrangement for feeding either the cans or the caps into the machine. Record 317. The cap feeding wheel used by the defendants was an original creation of their own. Record 315. In the defendants' machine this revolving cap feeding wheel removed the caps from the belt to their revolving seats, which, as the wheels revolve, will come over

the revolving can bodies beneath, and no mechanism, other than this revolving cap wheel, is required or used for so transeferring the caps from the feeding belt to their said seats. This cap feeding wheel revolves horizontally, and could not be made to act successfully in removing the heads from the inclined chute of Jensen to their seats over the can bodies beneath.

Now, in the Jensen machine the caps slide down the chute in an inclined position, and have to be stopped, and are stopped by the stop P, just *before they reach the bottom of the chute.* They are in their inclined position when they are so stopped, and it requires an extra amount of mechanism to change them from the inclined to a horizontal position and drive them further along into their seat over the can body.

After the can head is stopped near the lower end of the Jensen chute they must aagin be moved forward, changed from an inclined to a horizontal position and advanced to their seat over the can body. To do all of these things the Jensen machine has a large amount of special machinery, which is particularly specified by Mr. Burpee on page 313 of the record. By using the defendants' can head carrying horizontal belt instead of the inclined chute *no less than nine specific mechanical devices are dispensed with.* These are the arm Y, the bell crank Z3, connecting rod Y1, crank Z, connecting lever Z1, connecting link Z2, yoke X1, the connection that reaches down to cam W, marked X, and the cam W. All these devices are shown in the Jensen patent. *They are all necessary to the operation of the chute, and all are so used.*

Not one of them could be left out without stopping the successful operation of the machine. Record pages 313, 314 and 315.

For all the work performed by these nine pieces of mechanism the defendants use only one single piece of mechanism, and that is the revolving feed wheel; supposing that it could fairly be said that the defendants' mechanism, the head feed belt and head feeding wheel, did do the same work that the Jensen chute and its said accompanying mechanism did. Even this supposition, however, we deny, and assert that the operations performed by the defendants' head feeding belt and revolving feed wheel was different work from that performed by the Jensen chute and its accompanying mechanism that was used to transfer the head from the chute to its seat over the can body.

Comparing the head feeding mechanism of the two machines further, and it is seen that Jensen's starts with his inclined chute. The defendants not only do not have any inclined chute, but, as Mr. Monteverde truthfully swears, they *do not have any chute at all.* Record page 167.

Near the bottom of the Jensen inclined chute the can heads have to be *stopped,* and this is accomplished by the stop P, of the patent. The defendants' heads *are not stopped at all,* but move forward continuously from the time that they are placed upon the feeding belt until they are on the can body. Fingers, which have been shown to be unnecessary, were used by the defendants on most of their machines to regulate the run of the heads, but not to stop them. After stopping the heads

near the bottom of the chute the Jensen machine had to have all the nine pieces of mechanism before specified to get the heads into their seat over the can body, while in the defendants' machine the simple head feed wheel swept the heads sidewise off of the belt and placed them in the revolving head seats which were over the can bodies that were carried underneath in the revolving can body feed wheel. The Jensen machine during all its operations worked with stopping and starting motions, while the defendants' machine operated with a smooth continuous motion, that enabled the machine to head two cans while the Jensen machine was heading one. It is fully proved that none of the Jensen devices except the can feed belt were in the defndants' machine, and, further, that none of the Jensen devices, except said can feed belt, could be incorporated into the defendants' machine without destroying its entire operations. It is also proved beyond any doubt that none of the defendants' devices, except said can feed belt, could be found in the Jensen machine, and further, that none of the defendants' working devices, except said can feed belt, could be put into the Jensen machine without destroying its operation. Also that the machines from beginning to end, after passing the can feed belt, were differently organized. The *organic system* upon which one was built was that of a *stop motion machine,* while the *organic system,* upon which the other was constructed, was that of a *continuous motion* machine. In the face of all these undisputed facts, how can it be said that Jensen's patented invention is in the defendants' machine.

One machine can only be held to be an infringement of another patented machine when there are three distinct identities between the two. There must be

First. Identity of *result.*

Second. Identity of *means.*

Third. Identity of *operation.*

Only a few weeks since, on March 23d, 1903, the Unted States Supreme Court rendered a decision in the case of Kokomo Fence Machine Co. vs. Kitselmans.

The suit was brought for an alleged infringement of four different patents covering machines for making wire fabrics. The case is reported in the Patent Office Official Gazette, volume 103, on page 1417. On page 1422, the Supreme Court states the rule in the following language:

"We perceive no reason to decline acceptance of "these findings of the Circuit Court, and agree with "that Court in the conclusion that the machines lack "that *identity of means* and *identity of operation* which "must be combined with *identity of result* to constitute "infringement."

See, also, Robinson on Patents, Vol. 3, Sections 893 and 894.

While the ultimate result of heading cans is accomplished in both machines, the means used are surely entirely different and the operations of the means used are entirely different. The extreme differenc between the means employed by the two machines and the modes of their operations is accented by the fact that

none of those means can be transferred from one machine to the other without destroying the machine to which the means are transferred.

The case decided by our Court of Appeals, of Norton vs. Jensen, 90 Fed. 415, is much in point. On pages 428 and 429, the Court says:

"Looking at and comparing the old and new Jensen "machines, we find that the new Jensen machine, as al- "tered and changed from the old machine, does not con- "tain any such a thing as an 'annular space' in a sizing "and heading device having its end enlarged to fit the "exterior diameter of the can-head, nor anything that "reasonably approximates to it, *nor does it possess the "gravity chute* peculiar to Norton's invention. *It does "contain a can-feeder, but that is not operated by grav- "ity,* nor does it contain the device for that purpose pe- "culiar to the Norton chute. It is, *on the contrary, a "positive conveyer.* The cans are placed on the revolv- "ing disk, and the mechanism carries the cans to the "can-heading machine. The *Norton chute can in no "sense be regarded as the equivalent of the Jensen "chute,* any more than the latter could be regarded as "mechanical equivalent of the former."

* * * * * * *

"Further differences from a mechanical standpoint "might be enumerated, but it is obvious that in a patent "for a combination, which is what Norton claims, the "alleged infringing machine must contain all of the ele- "ments of the combination, or their mechanical equiva- "lents." Citing a list of authorities. There is more of

the decision in this case that is pertinent as legal authority on the questions of construction, equivalents and infringement.

For one device to be a mechanical equivalent of another the substituted device must perform the *same work* as the device performed for which it was substituted; and it must perform that work in substantially *the same way* as the original device performed it.

In the case of Engle Sanitary and Cremation Co. vs. City of Elwood, 73 Fed. 484, the Court, on pages 485 and 486, quote the rule and make citations in the following language:

"One thing, to be the equivalent of another, must perform the *same function* as that other; and, while it can be such an equivalent if it does more than that other, *it cannot be such equivalent if it does less.*" Walk. Pat., Sec. 352. And it is an essential rule, governing the aplication of the doctrine of equivalents, that *not only must there be an identity of function* between the two things claimed to be equivalents, but that function must be performed in *substantially the same way* by an alleged equivalent, as by the thing of which it is alleged to be an equivalent, in order to constitute it such. Walk. Pat., Sec. 353; Machine Co. vs. Murphy, 97 U. S. 120; Roller Mill Patent, 156 U. S. 261, 15 Sup. Ct. 333; Seeley vs. Electric Co., 44 Fed. 420.

In Machine Co. vs. Murphy, 97 U. S. 120, the Supreme Court, on page 125, says:

"Except where form is of the essence of the invention, it has but little weight in the decision of such an issue, the correct rule being that, in determining the question of infringement, the Court or jury, as the case may be, are not to judge about similarities or differences by the names of things, but are to look at the machines or their several devices or elements in the light of *what they do,* or what *office or function they perform,* and *how they perform it,* and to find that one thing is substantially the same as another, if it performs substantially the *same function* in substantially the *same way* to obtain the *same result*, always bearing in mind that devices in a patented machine *are different* in the sense of the patent law *when they perform different functions or* in a *different way,* or *produce a substantially different result.*"

"Nor is it safe to give much heed to the fact that the corresponding device in two machines organized to accomplish the same result is different in shape or form the one from the other, as it is necessary in every such investigation to look at the *mode of operation* or the *way the device works,* and *at the result,* as well *as at the means by which the result is attained.*"

"Authorities concur that the substantial equivalent of a thing, in the sense of the patent law, is the same as the thing itself;

so that if two devices *do the same work* in substantially *the same way*, and accomplish substantially *the same result*, they are the same, even though they differ in

name, form, or shape. Curtis, Patents (4th ed.), Sect. 310."

See also Walker on patents, Sections 352 and 353.

The subject of mechanical equivalents is exhaustively treated in Robinson on Patents from Section 245 to Section 258.

Here we turn to a piece of evidence that is of great value in deciding upon the issue of infringement, and that is the patent of the defendants. This patent is legal evidence that the defendants were themselves the inventors of the mechanisms and combinations therof, which are described in their specifications and covered by their claims.

It was decided by the Supreme Court in the case of Corning vs. Burden, 15th, Howard 252, that the defendant's patent furnished the presumption that his machine was new and not an infringement of the plaintiff's prior patent. Page 271 of the decision.

In the case of Ransome vs. Hyatt, 69 Fed. 148, this Court of Appeals endorsed the rule, "that the issuance of the defendant's patent creates a prima facie presumption of a patentable difference from the prior patent of the plaintiff." Citing several cases. This Court reversed the judgment in that case because the lower Court had ruled out the defendants' patent as evidence.

Now, there are several sections in Robinson on Patents, under which he is discussing the doctrine of me-

chanical equivalents that elucidates with remarkable and convincing clearness the effect as evidence of a defendant's invention in proving whether or not the thing that he is using is, or is not, a mechanical equivalent of a plaintiff's device.

Robinson all the while keeps in mind that the plaintiff's patent protects what *he has invented.* The patent cannot be expanded so as to reach beyond the patentee's idea of the means which he has employed in making his invention. Obviously he can patent only the means which he employs to obtain his results. He cannot patent the result itself, neither can he in a machine patent, patent the mode of operation. His *means for obtaining his results are the only things that the law can allow him to patent.* This we believe we have already shown by the authorities that we have cited. Robinson gives the patentee all the means which he had used, and this includes such mechanical equivalents as were within his ideas of the means which he employs. This is going as far as the patent law allows. If a defendant uses means to accomplish the same result as that accomplished by the patentee, and the means so employed by the defendant are not within the patentee's ida of means, but were something that he had never thought of, they, of course, could not constitute any part of his invention. Things that had never come to his mind, that he had never used, that he had never produced, and the possibility of which he had never conceived or thought of he, of course, could not have been the inventor of. Those

things which were *first invented subsequently to the invention* of the patentee, and by other parties, could not possibly be the patentee's invention. Such things would not be shown in his application for a patent, nor in the specifications or claims of his patent. True they might patented invention, and therefore could not be lawfully used without his license, but even then they would not be any part of his invention, and he would have no right to use them.

Even if they were improvements upon his patented machine and, for that reason, could not be used without his consent, they nevertheless, in and of themselves, would not be any infringement of his patent or any equivalents of its mechanism. If the defendant infringed the plaintiff's patent it must be because he used the patented invention itself, and not because he used the improvement that he had added to it. That improvement the plaintiff would have no right to.

Now in this case the defendants, Letson and Burpee, invented the machine which they use. This is indisputable, and we believe is undisputed. They did not take the Jensen machine and add an improvement to that. Their whole mechanism, except the can feeding belt, was new and original with them. It had never been used before by any one, and certainly not by Jensen. It was a new *kind* of machine. None other had ever been made upon the same general plan as that was built upon. Its can feeding wheel was new with them. Its cap feeding wheel was new with them. The placing of both of those feeding wheels upon the same revolv-

ing shaft was new with them. The revolving table in which were the seats for the can bodies to occupy while the heads were being applied was new with them. The revolving table inwhichwere the seats for the can heads to occupy while the cans were being forced into them was new with them. The putting both of those tables on the same revolving shaft, one over the other, was new with them. The application of two gear wheels, by which one of those shafts was made to revolve the other shaft, was new with them. The building of the machine and arranging the parts so that the heads and cans would go through the machine, and the cans be headed while so going through the machine, and without stopping, was new with them. The whole movements, and life and soul of the machine, excepting only the can feeding belt, was new with them and was born of their inspiration. None of these things came from Jensen.

Now Section 253 of Robinson on Patents says:

"253. EQUIVALENCE IMPOSSIBLE WHEN THE IDEA OF "MEANS IS CHANGED.

"The second essential requisite in an equivalent is "that its use in the invention must not involve a change "in the idea of means. A change in the idea of means "is a change of substance, demanding an operation of "the creative faculties and producing either a new in- "vention or an improvement on the old. The substitu- "tion of equivalents is, on the contrary, a mere change "of form, involving no inventive skill, but suggested by "the invention itself to every person familiar with the "art to which the invention appertains. Any act or

"substance, therefore, however accurately it performs "the function of the element whose place in the inven- "tion it supplies, is *not a mere equivalent if in addition "it has also introduced a new idea or a development of "the old idea of means.* While an equivalent may act- "ually accomplish more, or operate to better purpose "than the former, its excess of action must be consistent "with the *unity and identity of the idea embodied in the "original invention.*"

Section 256 of the same great author is as follows:

"256. EQUIVALENCE IMPOSSIBLE IF THE ALLEGED "EQUIVALENT HAS BEEN INVENTED SINCE THE "ORIGINAL INVENTION WAS PATENTED.

"The third essential attribute of an equivalent is that "it must have been known as such at the date of the pat- "ent, or have since become known without the exercise "of inventive skill. The substitution of one equivalent "for another is a change in the form of embodiment "only; and as all forms of embodiment known in the "arts are presumed to have been also known to the in- "ventor and to have been open to his selection, his "choice of one and its employment points out the mode "of using all the rest, and thus renders every other an "imitation of his own. But acts and substances which "have been invented, or whose availability for the em- "bodiment of his idea of means has been discovered and "applied by the exercise of additional inventive skill, "since he completed his invention and bestowed it on "the public by his patent, are not imitations of the ele- "ments in which he has embodied his idea. Their crea-

"tion or discovery, and their adaptation to the purposes "of his invention have resulted from a subsequent and "separate inventive act—an act performed after the "completion and publication of his invention, and "hence, though capable of exact substitution for the acts "or substances he has employed, they are not true equiv- "alents whose use causes a mere diversity of form, but "new inventions expressing a diversity of substance. "The attribute of knowledge, at the point of time when "the inventor's right received the positive sanction of "the law, thus enters into the character of an equivalent. "If then known as a substitute, the substitution is an al- "teration in the form of the embodiment, a simple "equivalent and nothing more. If then unknown, its "subsequent creation and adaptation to the invention "by the exercise of inventive skill, if not resulting in an "essential alteration in the idea of means, is at least a "development of that idea, and constitutes an improve- "ment."

Therefore we urge that the defendants' can head carrying belt is not the mechanical equivalent of the Jensen inclined chute, and that there has been no infringement of said claim five of the Jensen patent:

Because the inclined chute of the Jensen patent was a mere stationary device that had no movement whatever, and did not carry the can heads, but merely allowed them to *slide* down its incline by the power of gravity alone, while the head feeding belt of the defendants' was not a stationary device, but was a moving piece of mechanism that received and *carried* the can

heads with steady and equal movement, and did not allow them to slide at all, and to which the power of gravitation was not applied and could not be applied, and the action and operation of the two devices was not the same, or of the same kind, and:

Because the sliding of the cans down the inclined chute by gravitation was a result that was not produced in the defendants' machine while the result of receiving and carrying the can heads in a horizontal line and at a uniform rate of speed was a result that was accomplished by the defendants' can head feeding belt for the first time in the world and was a different result from that accomplished by the inclined chute, and:

Because the character and actions and operations of the chute and carrying belt were of such vital differences that one could not be used in the place of the other, were not interchangeable and would not operate with the same kinds of the additional mechanism that was necessary to be added in order to make the devices operative in can heading machines, and:

Because the inclined chute when incorporated into a can heading machine required one character of accompanying mechanism to make it operative and effective, while the can head feeding belt when incorporated into a can heading machine required an entirely different kind of accompanying mechanism to make it operative and effective, and:

Because the can head feeding belt was a device that was entirely *outside of any means* that were described or used in the Jensen patent, and:

Because the incorporation of the can head feeding belt into a can heading machine, and combining it with new mechanism with which it would operate harmoniously and effectively in doing the work of heading cans was a *new and useful invention that was made by the defendants long after the Jensen machine had been on the market and in use and all of its mechanisms, operations and possibilities were well known, and which did not include any of the mechanisms of the defendants' machines,* excepting only the can body feeding belt, and:

Because the defendants' patent proves their machine to be a new and useful invention, and:

Because the oral testimony proves beyond any doubt that the defendants' machine will do double the quantity of work that the Jensen machine can do, and thus produces a further new and useful result that flowed from the defendants' invention, and:

Because not only the defendants' patent, but also the oral testimony taken in the case proves beyond any doubt whatever that the defendants' machine as a whole, and in all of its combinations of devices was the invention of defendants. The defendants' machine is not something that is added to the Jensen machine, nor does it take any of the Jensen devices and change them into different forms or shapes, but it is a new machine throughout, excepting only the can body feeding belt, and there is not a single combination which includes even that belt, that was ever in the Jensen machine or that is shown in the Jensen patent.

The next claim of the complainant's patent of which infringement is charged is claim nine. It is as follows:

"9. The vertically moving plunger upon which the "cans are delivered by the feeder, in combination with "the conical guide situated above the cans, and the "transversely-moving slides upon which the caps are "received and held, with a mechanism by which the "slides are withdrawn as the can enters the cap substan- "tially as herein described."

This is a combination claim of which the vertically moving plunger is the first and most important mechanical element. Without this vertically moving plunger no cans could be headed in the machine.

The first question we present in regard to this claim is this: Have the defendants used this vertically moving plunger of the Jensen patent? We contend that they have not.

As has already been described both in the patent and in the testimony, without any conflict whatever, this vertically moving plunger, which is the plunger S, of the patent, is movable only in a vertical direction. It has no horizontal movement whatever. It is stationary except as to its vertical movement.

Another feature of this vertical plunger is that it *operates with an intermittent motion.* It rises to force the upper end of the can into the can head or cap, and then descends into its normal position and remains stationary while the feeder F, with its arms H, carry the headed can off from the plunger and places another

filled can upon it. This plunger S is operated by movable mechanism which raises and lowers it. None of these features apply to the devices which are used by the defendants in their machines, which devices are asserted to constitute mechanical equivalents of the complainant's plunger S.

In the lower figure of the Monteverde drawing No. 6, record 498, is shown the plunger S, with a filled can just placed thereon by the arms H, of the feeder F. In this figure is also shown the mechanism that is used as described in the patent, to raise and lower the plunger. The patent, in the last column of page 3 of the specifications, describes this apparatus as follows:

"The plunger S is raised by the arm e, one end of "which acts against the bottom of the plunger, the "other end being fulcrumed to a fixed support, and "having a roller, f, turning upon a downwardly-pro- "jecting arm or shaft, as shown. This roller is en- "gaged and actuated by a cam, g, upon the lower end "of the vertical shaft which carries the crank I. The "action of this cam upon the arm e raises the plunger "S, which drops by gravitation, or, if preferred, may "have a spring applied, so as to cause it to move with "greater activity." Record, 516.

The Court will notice that the cam, g, above mentioned, is a disk which is mounted upon the vertical shaft which passes through the disk at one side of its center. This converts the disk into a cam and enables it to operate the said mechanism to raise and lower the plunger S.

In the first figure of the Monteverde drawing, No. 12, Record, 505, is shown parts of the defendants' apparatus. The filled can is there shown as being just delivered from the revolving feeder wheel, 36, on to one of the can supports 19, which has a stem 18, that passes down through the radial arm 14a, of the carrier 14. There are four of these radial arms and there are four of the can supports 19, each one of which has a stem 18 that passes down through one of said radial arms 14a. Said carrier 14 rotates around the vertical stationary shaft 13. The rotary feeder 36, is so timed that it will deliver a filled can upon one of said can supports 19, at just the moment that the can support is in the right position to receive it. There are four of the pockets in the feeder wheel 36, and there are four of the can supports in the radial arms 14a, of the carrier 14. The feeder wheel 36, and the carrier 14, *revolve horizontally and continually without stopping at all while the machine is at work.* See also figure 1 of the defendants' patent. Record, 520.

Underneath the parts mentioned is what the defendants' patent calls a member 47, having inclines or "chases" 46 on its upper surface. As the carrier 14, revolves the lower ends of the spindles 18, are forced upwards by the rising incline 46, and the upper end of the can body is forced into the can head over it.

As the carrier 14 continues to revolve the spindle 18, riding upon the downwardly inclined surface of the circular cam 46, will descend down its incline carrying the headed can down with it .This headed can will be

removed from the can support 19, by further mechanism, not yet herein described, but which is not any part of the feeding apparatus. In the Jensen patent the headed can is removed from the plunger S by the feeder F with its arms H, which is the same mechanism that placed the unheaded filled can upon the plunger. The defendants' feeder 36, finishes its work with each can when it has deposited that can upon one of the can supports 19.

We think that the defendants do not have in their machine the plunger S, nor any mechanical equivalent of it. The differences between the plunger S and the defendants' can supports are so many and of such character as to prohibit the idea that one is the equivalent of the other. The plunger S moves *only in a vertical direction.* The can supports each move in a horizontal circle, which is utterly impossible for the plunger S to *do.* The can supports are raised and lowered by a *fixed stationary cam.* The plunger S must be raised *by the action of moving machinery, and cannot be operated by a stationary cam.* The *can supports have no intermittent or stop motion.* The plunger S *has an intermittent motion and cannot be operated without it.* The plunger S cannot be taken out of the Jensen patent and put into defendants' machine without destroying the operation of the machine. Neither can the can supports be taken out of the defendants' machine and put into the Jensen header without destroying the operation thereof. It is not denied by complainant but that the defendants' machine is *differently organized from the*

Jensen machine from beginning to end, and because of it being so differently organized, *it has more than double the capacity of the Jensen machine*, and its mechanism all through, except as to the feeder belt that carries the filled can into the machine, is also different from the Jensen machine. After passing the first feeder belt that carries the filled cans into the machines, *there is not a single piece of mechanism that could be taken out of one of the machines and put into the other machine and made to operate in the place of any piece of mechanism that might be taken out of the other machine to make room for it.*

If the defendants' can supports are not the mechanical equivalents of the Jensen plunger S, then the defendants have not used the combination of said claim nine, and in such case it makes no difference whether the defendants used the other mechanical elements of the claim or not.

The other elements of the claim are:

The conical guide situated above the cans;

The transversely-moving slides upon which the caps are received and held; and

A mechanism by which the slides are withdrawn as the can enters the cap.

The said conical guide is made of *two* slides TT, which reciprocates towards and away from each other. In the ends of the slides adjoining each other is cut out one-half of the conical guide, so that when the two slides are pushed together there is formed by them a

cone shaped hollow that is wider than the diameter of the can head at the bottom, and just wide enough at the top to allow the upper end of the can body to pass through it. It is placed directly over the plunger S. Just at the top of this cone shaped hollow there is cut out a small circular recess, the bottom of which forms a flange the thickness of a piece of tin. The diameter of the recess is just great enough to receive the can head, and in operation the can head is placed in said circular recess, with the edge of its rim resting upon said flange. The said can head is held in said position, and when the filled can standing upon the plunger S, is raised upwards, its upper end is guided by said conical hollow into the rim of the can head, and the can is thereby headed.

When the can is thus headed the slides TT are drawn apart so as to allow an opening large enough for the head to pass down through, and the plunger S is lowered and carries down with it the headed can.

These slides T, T are moved back and forth, by means of two other slides, the mechanism being described in the patent as follows:

"Above the feeder or carrier F, upon a suitable support, are two sildes, a, moving in guides parallel with the direction in which the caps move between them from the bottom of the inclined chute to the position where they are placed upon the cans. These slides have inclined or cam shaped slots made in them, and pins a 1, project upward into these slots from the transversely moving slides which are situated below

them, so that as *these slides a are moved* backward and forward *they* will actuate the transverse slides T, so as to hold the cap above the can until the can has been pushed up into it, after which they are opened to release the cap and allow the can and cap to be depressed, as before described.

The slides a are united by a transverse arm or lever b, which connects with pins projecting upward from the slides a, so as to engage each end of this oscillating arm, which is pivoted or fulcrumed at the center. One of the slides is connected by an adjustable connecting rod, G, with the crank I, by which the sweep of the feeder is produced, so that the slides a, move simultaneously with the movement of the feeder, and thus operate the transverse slides T, as before described."

The Monteverde drawing No. five, in both figures, assist in explaining the foregoing described apparatus. Record, 497.

It will be noticed in the foregoing that both the slides, T, T, and a, a, are operated by *moving* mechanism and *no stationary cams are, or can be used in operating them, or either of them.*

The conical guides as a mechanical device in can-heading machines for guiding the upper end of a vertical can body into the head above it, was not new with Jensen. We have put in evidence a U. S. patent granted to Edmund Jordan, October 28th, 1884, for an automatic can heading machine in which such a device is used. A full sized model of the same is in evidence

as Exhibit E. The patent thereon is to E. Jordan and is in the record, pages 543 to 550, is defendants' Exhibit B.

The other patent put in evidence is Exhibit A. It is patent No. 265,617, dated October 10th, 1882, and was granted to George A. Marsh, for a machine for heading cans.

A model of this Marsh patent is put in evidence as Exhibit F.

The patents were put in evidence during the cross-examination of Mr. Seely. Record, pages 256 to 261.

We have already called the attention of the Court to these two patents and largely explained them. As the conical guide is one of the mechanical elements of claim nine, which is under discussion here, we refer to them briefly on account of their near relation to said claim.

The models were put in evidence during the examination of Defendant Burpee, and he has made full and intelligent descriptions and explanations thereof. Record, pages 328 to 337.

Beginning on page 337 and going to page 344, of the reocrd, Mr. Burpee gives a good description of the conical guides of the Jensen patent, as well also as a description of the conical guides of the defendants, and of the mechanism by which they are actuated. We cannot improve on Mr. Burpee's description, and therefore refer the Court to the said pages of the testimony for such description, which includes a good and intelli-

gent comparison between the Jensen conical guide and the defendants' conical guide, as well as of the different mechanisms by which the two are operated. This testimony, when read in connection with the Jensen patent, the defendants' patent, and with the models and machines in evidence, is absolutely irrefutable, and *no attempt whatever has been made to refute it.* Mr. Burpee's testimony was so perfectly fair all through, and also, so full, comprehensive and exhaustive, that *not a single witness was put on the stand in rebuttal.* Mr. Burpee and Mr. James Fowler were the only witnesses sworn on the part of the defendants. There are only five pages of Mr. Fowler's testimony, which goes from page 361 to page 366 of the record . While there are only these two witnesses who testified on the part of the defendants, the complainants have paid their testimony a very high compliment by declining to make any attempt to contradict any of it.

Under these circumstances we think we may ask the Court to do, as the complainant has done, that is, accept the testimony of Mr. Burpee as absolutely true and irrefutable.

Going back now to pages 328 to 344 of the record, and reading that in connection with the exhibits which it refers to, and we find, first, that conical guides, as an elementary device for guiding the upper end of a vertical can body into the flange of a can head, in heading the can, was not new with Mr. Jensen, but the same was an old device as compared with the date of his invention.

Also that in so using said conical guide there was always a flange around the upper end of the conical guide, which was just large enough to receive and hold the can head in place with the edge of its rim or flange resting on such flange. See Figures 13, 14, 16 and 19 of the Jordan patent. Record, 546. Also Figures 6 and 5 of the Marsh patent, with the description thereof in its specifications. Record, pages 537 and 538.

We also find with these machines that when the upper end of the can body was forced into the can head by the use of the conical guide that there was mechanism by which the flange on which the can head rested was withdrawn so as to allow the head to pass through the opening so as to leave the can headed, and not pull the head off from the body. In other words,*so far as the conical guide was concerned, for guiding the upper end of the can body into the can head, combined with a flange for the head to rest on, and means for withdrawing the flange when the can was headed, the same were not new with Jensen.* We do not for a moment assert that because of these things Jensen could not make new combinations, and a new machine that involved invention. His machine as an entire machine might be a new machine, and the combinations and sub-combinations of mechanism might be new with him. This we are willing to concede. But when it comes to working out an infringement by treating the defendants' machine, which confessedly *is an entirely new organization, not built upon Jensen's plan of a heading machine, not containing any of his new ideas, not containing any of his new devices, and not contain-*

ing any of his sub-combinations, but instead thereof being constructed upon a *plan so different from Jensen's that none of his new ideas can be found in it—none of his general organization can be fonud in it, and none of his new devices, or new ideas, or new sub-combinations of devices can be put into it without destroying the operation and mode of operation of the machine as an entirety, and also destroying the local operation of each and every part for which one of the Jensen devices or sub-combinations might be substituted,* we rebel, and assert that no such infringement does or can exist.

In the defendants' machine there is mounted upon the carrier 14, a table 20, which rotates with the carrier. In this table 20, are four holes, and in these holes the caps are placed by the cap feeder 37. It is *these holes that center the caps, and not the slides,* which form the conical guides. This is one of the differences between the Jensen patent and the defendants' machine. Record, 339.

The devices used by Jensen for moving the slides that form the conical guides *could not be used for moving the defendants' slides. Nor could the defendants' mechanism be used for moving the Jensen slides.* The two mechanisms which are used in the respective machines are not mechanical equivalents of each other. This, we think, is proved beyond a doubt, and would be obvious without any proof, other than a comparison of the Jensen patent and the defendants' machine. Record, pages 339, 340, 341, 342 and 344. On these

pages it is shown that the mechanism used by the defendants for moving their slides are a *stationary* cam, an arm 54, and the ring 52, which is underneath the three slides 51. That the arm 54 *is carried around in a circle, and if it was not so carried around it would not be operative in the defendants' machine.* That there is nothing in the Jensen patent *that corresponds with that arm or that performs the same function.* That there is so much of the mechanism of the defendants' machine that revolves around a central axis that it makes *the entire organism of the defendants' machine different from the entire organization of the Jensen machine,* and also requires that the *individual devices* which are put together to make up the entire machine *must be of a different character and of a different operation* in nearly every instance where there is anything in the nature of corresponding individual devices used in the two machines.

In the said claim 9 the "mechanism by which the slides are withdrawn as the can enters the cap," constitutes one of the mechanical elements of the combination covered by the claim. Neither *that mechanism nor any mechanical equivalent of it is in the defendants' machine,* and for this additional fact the combination of said claim 9 is not in the defendants' machine and the claim is not infringed. Two of the mechanical elements of said claim 9 are absent from the defendants' machines. These are the vertically moving plunger S, and the mechanism which withdraws the slides when the can enters the cap.

Before quoting the next claim which is asserted to be infringed we will refer to the testimony of Mr. Burpee, wherein he shows in what respects the machines resemble each other, and also in what respects they do not resemble each other.

On page 419 of the record, on cross-examination, Mr. Burpee was asked whether there were not some fundamental resemblances between the defendants' and the complainant's machines, and he answered that there were, and named as such resemblances "the means by which the can is guided centrally into the cap, *but* "that *would also apply in the Jordan machine, on exhibit here, and the Marsh machine, on exhibit here.*" The conical guide situated above the can; in each of these machines, the can is operated upon *in an upright position;* there is a conical guide situated above the cans; there is an opening and closing mold, as it might be called, it is called by different names in different machines, which, when closed, form a complete circle, and there is a ledge upon which the can head rests. The circular or conical shaped opening acts to round up and size and guide centrally the can into the can head, which is a *fundamental principle in all of the four machines on exhibit here.* In some machines the can is raised into the cap, while in others the cap is lowered over the can.

Besides these there is the carrying belt that carries the cans into both the complainant's and into the defendants' machines, which is another resemblance, as is also the spacing devices that regulate the cans upon

the belts. These are the *resemblances* of the two machines. Pages 419 and 420.

The differences between the complainant's and defendants' machines we have been pointing out and will not repeat them here. They are fundamental and for this reason the two machines have different fundamental operations that require different methods of construction and different mechanism. These operations and mechanism are so fundamentally different that the mechanism of one machine cannot be used in the other machine, and are also so different that there is not a single combination of either one of the Jensen claims that is used, or that could by any possibility be used in the defendants' machines.

The resemblance which Mr. Burpee has so frankly, fully and intelligently pointed out does not result in finding in any of Jensen's claims any combination that is in the defendants' machines. These resemblances are many of them not new in the Jensen machine, but were contained in the prior Jordan and Marsh patents, and we submit that the resemblances which are common to the four machines could not lawfully be covered in Jensen's claims, and, *as a fact, they are not covered by the Jensen claims or any of them.*

We turn now to the remaining two claims which are asserted to be infringed. They are claims ten and eleven. On account of their close resemblance of each other we will treat them together. They are as follows:

"10. The vertically moving plunger by which the "can is raised to receive the cap, and the guide into "which the upper end of the can enters the trans- "versely-moving cap-holding slides, in combination "with the second plunger moving vertically above the "cap and following it down by gravitation or other- "wise, so as to steady the can in its descent after the "cap has been applied, substantially as herein de- "scribed."

"11. The vertically moving plunger upon which "the can is received, a carrier for placing the can upon "the plunger, and a mechanism by which this plunger "is reciprocated vertically in combination with a second "plunger, which rests upon the top of the cap and "steadies it while descending, and a mechanism for "raising the second plunger before the arrival of the "next cap, substantially as herein described."

Each one of these claims is for a combination which includes as one of its mechanical elements the vertically moving plunger, which is of course the plunger S. This vertically moving plunger we have already discussed and need not repeat the discussion here. Unless this vertically moving plunger S, or a mechanical equivalent of it, is in the defendants' machine, the combination of each one of the claims is not in the defendants' machines, and neither of the claims is infringed. If, therefore, the Court sustains our contention that neither the plunger S, nor any mechanical equivalent of it is in the defendants' machines, then neither of these two claims are infringed, even though every other mechan-

ical element, that is included in the combinations, was used by the defendants just exactly as they are described and used in the Jensen patent. In such case there will be no need to examine the mechanical elements, other than the plunger S, of these two claims to see whether or not the defendants have used any of them.

Said claim ten includes in its combination as one of its elements the second plunger moving vertically above the cap and following it down by gravitation or otherwise so as to steady the can in its descent after the cap has been applied. This device is the plunger U, of the patent.

What is claimed by complainants to be the equivalent in the defendants' machine of this upper plunger U, of the Jensen patent, is a device called in the testimony a cap-presser. The two are described in Burpee's testimony. Record, 345 to 353. To that testimony we refer the Court for a description and comparison of the plunger U, and the said cap-presser.

At the upper end of the defendants' stationary vertical shaft 13, is a stationary radial cam 28. A carrier 24, is secured upon the rotating table 20, said carrier having four radial arms 24a, in which are held spindles 25. At the lower end of each of these spindles is mounted and carried a disk 26, adapted to press down upon the can caps. A collar 29, is adjustably secured to the top of each of the spindles 25, and from each of these collars another spindle projects inwardly and carries an anti-friction roller 30, adapted to engage

the stationary cam 28, whereby the spindle with the disk 26 at its lower end will be raised and lowered as required. It is this disk 26, that is called the cap-presser, and it is operated by the spindle 25, collar 29, and anti-friction roller 30, as the apparatus revolves around the stationary cam 28.

The object of this cap presser is to hold the can head in the opening 21, in the rotating table 20, when the can body is raised to enter the head. As is shown by the testimony, this cap presser *does not follow the headed can down and steady it as it goes down.* A sufficient comparison is made in Mr. Burpee's testimony, in the record, from page 345 to page 351, and we think it shows that the cap-presser is not the plunger U, of the Jensen patent, nor is it any equivalent of it. In the defendants' machine the can body is received and held in place on its support by guides 40 in the nature of radial arms secured to the support or stem 20a of the table 20, and having can holding recesses therein. See figure one of the defendants' patent drawings, and folios fifty-five to sixty, on page two of their specifications. Cut number seven, page 448, of the record, was supposed to represent said figure one of the defendants' drawings. It, however, does not have on it the can body recesses 40, which are shown in said figure one and explained in the specifications above referred to. This leaving off of the Monteverde cut seven the can body holders 40, was not quite fair since, in connection with that omission, the attempt was seriously made to make it appear that the defendants' headed can was steadied and secured in its place, while descending, by the cap

presser. Mr. Burpee shows in his testimony that this was not so, but that the recesses 40, etc., were the devices that held the can body to its place during the heading and discharging operation. Record, 349. A plunger as a device is old, and when the attempt is made to cover the plunger as an element of any working combination in the Jensen machine, there *must be enough of the mechanical elements read togther to make an operative combination or operative sub-combination.* We will not make any extended criticism of this attempt to make the cap-presser of the defendants' the same thing as the plunger U of the Jensen patent. It is the same story, over and over again. *The defendants' machine acts upon the rotary principle, and Jensen's does not.* The consequence is that *there are no operative mechanical combinations that are used in one that can be used in the other.* The defendants' cap-presser is a machine in itself. It contains the spindle 25, the disk 26, at the bottom, the collar 29, and the roller 30. *The whole must swing around in a circle.* Jensen's plunger is differently constructed and operates differently, having only the direct vertical movement. It could not be used in the defendants' machine without changing its construction and its operation. The cap holding slides, elements of this claim, are also differently constructed, and are operated in a different manner from those of the defendants.

As to said claim 11 of the Jensen patent, it contains as an element of its combination the vertically moving plunger S, which we believe we have shown is not in the defendants' machine. The combination of this claim

also covers as a part of its elements a carrier for placing the can upon the plunger. This is the carrier F, and *carrier F is not in defendants' machine,* and the Circuit Court so decided. It also contains as a part of its elements the mechanism by means of which the plunger S is reciprocated vertically. This mechanism is not in defendants' machine. It also contains as part of its elements the second plunger U, which we have already discussed. It also contains as part of its mechanical elements the mecahnism used for raising the second plunger U, and this mechanism is not in the defendants' machine.

On page 443 of the record is found a drawing that we believe was not put in evidence and there is not in the record any explanation of it. We believe that it represents the can body feeding belt of the second Jensen machine. We only mention this that the Court will not get puzzled in any way by finding the drawing in the record and no testimony regarding it.

The manner of working out infringements by the use of mechanical equivalents, by the complainant's experts, is so far fetched and so original, and yet so far outside of any rule of law that we should not notice them at all if it were not for the fact that the Circuit Court decided that there was an infringement of three of the Jensen claims.

The method of said experts can be illustrated by supposing that an inventor had invented an overshot water wheel, and had operated it for driving the machinery

of a cotton mill; and supposing further, that a later inventor had invented a steam engine and had used it for driving the machinery of a cotton mill.

According to the opinions of the complainant's experts, as the water wheel by the application of *water* to drive it furnished power to drive a cotton mill, and as the steam engine by the application of *steam* to it also furnished power to drive the cotton mill, the two were equivalents of each other. As the water was the means by which the water wheel was run, and steam was the element by which the engine was run the *steam* would be the equivalent of the *water,* notwithstanding that the water could not be used to drive the engine, nor the steam applied to driving the water wheel.

On pages 161 and 162 of the record Mr. Monteverde testifies that the cranks J, J and I, were the devices that actuated the *Jensen* feeder F; that these devices were not in the defendants' machine; yet that the gears 31 and 39 were the actuating devices that gave movement to the *defendants'* feeder 36, and that these actuating devices *took the place of the actuating devices that operated the feeder in the Jensen machine.*

After stating that the said cranks were the actuating devices of the Jensen feeder F, he is asked, in cross-question 167: "There is nothing in the defendants' "machine that takes the place of those actuating de- "vices, is there?" and he answered by saying:

"Certainly; the actuating devices that give move-"ment to the feeder 36 in the defendants' patent."

Further in the same answer he shows that the defendants' actuating devices are the gears 31 and 39, and further, on the same page, he swears that there is nothing in the defendants' machine that operates as do the actuating devices that move the feeder F, by stop motions in the Jensen patent.

Evidently his construction is that as the said cranks actuate the stop motion feeder in the Jensen machine, and as the said gears operate the continuous moving feeders in the defendants' machine, the gears are a mechanical equivalent of the cranks, although one could not be operated in the place of the other.

The witness Seely also testifies on page 249 of the record that he does not find the *Jensen feeder F,* in defendants' machine, but he does find the *defendants' feeder* there and actuating devices by which the motions of such feeders are produced.

Mr. Seely further testifies, on pages 243 and 244, that it would be absolutely impossible to take the defendants' feeder out of their machine and put it into the Jensen machine; also that he could not put the sweeping feeder of the Jensen machine into the defendants' machine without destroying its operation, yet he was clear in his mind that the rotary feeder 36 of the defendants' machine was a mechanical *equivalent* of the Jensen sweeping feeder. On page 244 Mr. Seely talks about drawing claims to describe an invention so

as to protect the patentee *from any subsequent improvements;* and also about claims *being infringed by a subsequent invention.*

Of course no patent can so cover any invention that other and further improvements may not legally be made on it, and further, one patentable invention can never be an infringement of a prior patented invention. His idea of equivalents and of the scope which claims may be drawn to cover, are quite contrary to orthodox patent law.

No attempt has been made to reach and cover the defendants' machines except by the application of the doctrine of mechanical equivalents; and we insist that in every instance in which any device of the defendants has been claimed to be an equivalent of some corresponding device in the complainant's patent there has not been either that identity of means, or identity of operation, or identity of result, that is necessary to make one device the equivalent of another within the provisions of the patent law. We except from this statement the can body feeding wheel as an individual device, but nothing else.

Also, it is proved to an absolute certainty that the defendants' machine was an *invention made by them,* and was *patented to them,* and that there is not an outline or a shadow that is to be found in the Jensen patent, nor is there an outline or shadow of it it contained in the Jensen invention.

The Court will notice that in this brief we have treated the Jensen patent just as though its claims in-

cluded mechanical equivalents, to the broadest extent that equivalents can ever be covered by combination claims.

We believe that we have demonstrated and shown that the defendants' machines are not any infringement of any claim of the Jensen patent sued on, and that the decree of the Circuit Court should be reversed in so far as it adjudges that the defendants have infringed the patent sued on or any of its claims.

Respectfully sumbitted,

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